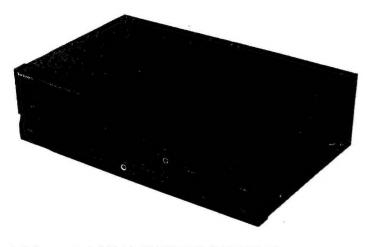
ORDER NO. AD9301002C0 Service Man

Dolby NR-Equipped Stereo Double Cassette Deck

RS-TR777

DOLBY B.C NR HX PRO



RS-TR979 MECHANISM SERIES (AR-1)

SPECIFICATIONS

CASSETTE DECK SECTION

Deck system Stereo cassette deck Track system 4-track, 2-channel AC bias Recording system Bias frequency 80kHz **Erasing system** AC erase

Heads

DECK 1 Playback head (Permalloy) × 1 Recording/Playback head (Permalloy) × 1 DECK 2

Erasing head (Double-gap ferrite) × 1

Motors

DECK 1 Capstan/reel table drive (DC servo motor) x 1

Reel table drive (DC motor) × 1

DECK 2 Capstan/reel table drive (DC servo motor) × 1

Reel table drive (DC motor) × 1

Tape speed 4.8 cm/sec. (1-7/8 ips)

Wow and flutter

For (PP) area 0.1% (WRMS) For others 0.07% (WRMS) ±0.2% (DIN)

Fast forward and rewind times

Approx. 45 seconds with C-60 cassette tape

Frequency response (Dolby NR off)

NORMAL 40Hz-15kHz±3dB For (PP) area 20 Hz - 17 kHz For others 20 Hz - 16 kHz (DIN) CrO₂ 40Hz-15kHz±3dB For (PP) area 20 Hz - 17 kHz For others 20Hz-16kHz (DIN)

Colour

(K) ... Black Type

	41.2	
ΔI	Δ.	•
	C	o

Suffix for Model No.	Area	Colour
(PP)	U.S.A./Canada.	
(EB)	Great Britain.	
(EG)	Germany, Italy and Continental Europe.	(K)
(GC)	Asia, Latin America, Middle Near East and Africa.	(14)
(GN)	Oceania.	

* HX Pro headroom extension originated by Bang Olufsen and manufactured under license from Dolby Laboratories Licensing Corporation. "DOLBY", the double-D symbol, and "HX PRO" are trademarks of Dolby Laboratories Licensing Corporation.

METAL

40 Hz - 16 kHz ± 3 dB

For (PP) area

20 Hz - 18 kHz 20Hz-17kHz (DIN)

For others S/N (Signal level=max recording level, CrO₂ type tape)

NR off

56dB (A weighted) Dolby B NR on 66 dB (A weighted)

Dolby C NR on 74dB (A weighted)

Input sensitivity and impedance

REC (IN)

100 mV/47 kΩ

Output voltage and impedance

PLAY (OUT) **HEADPHONES**

 $37.5\,\text{mV}/(8\Omega)$

(Load impedance $8\Omega - 600\Omega$)

GENERAL

Power consumption

25 W

500 mV/500Ω

Power supply

For (PP) area

AC 60 Hz, 120 V AC 50/60Hz, 110V/127V/220V/240V

For (GC) area For others

AC 50/60 Hz, 23OV-240V

Dimensions (W \times H \times D)

430 × 135 × 280 mm (16-15/16" × 5-5/16" × 11-1/32")

Weight

4.9kg (10.8lb.)

Note:

Specifications are subject to change without notice. Weight and dimensions are approximate.

Cechnics

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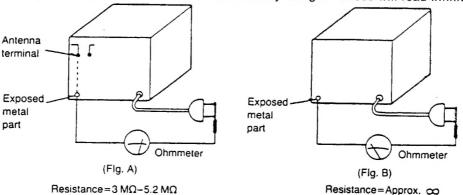
SAFETY PRECAUTION (This "safety precaution" is applied only in U.S.A.)

- 1. Before servicing, unplug the power cord to prevent an electric shock.
- 2. When replacing parts, use only manufacturer's recommended components for safety.
- 3. Check the condition of the power cord. Replace if wear or damage is evident.
- 4. After servicing, be sure to restore the lead dress, insulation barriers, insulation papers, shields, etc.
- Before returning the serviced equipment to the customer, be sure to make the following insulation resistance test to prevent the customer from being exposed to a shock hazard.

INSULATION RESISTANCE TEST

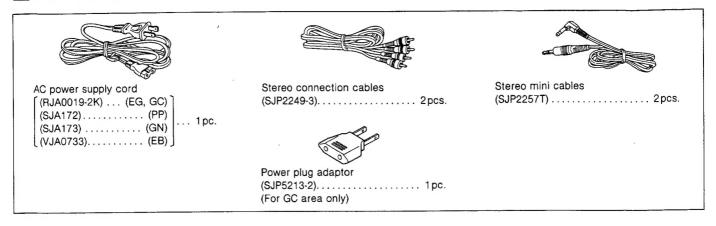
- 1. Unplug the power cord and short the two prongs of the plug with a jumper wire.
- 2. Turn on the power switch.
- 3. Measure the resistance value with ohmmeter between the jumpered AC plug and each exposed metal cabinet part, such as screwheads antenna, control shafts, handle brackets, etc. Equipment with antenna terminals should read between $3M\Omega$ and $5.2M\Omega$ to all exposed parts (Fig. A). Equipment without antenna terminals should read approximately infinity to all exposed parts (Fig. B).

Note: Some exposed parts may be isolated from the chassis by design. These will read infinity.



4. If the measurement is outside the specified limits, there is a possibility of a shock hazard. The equipment should be repaired and rechecked before it is returned to the customer.

ACCESSORIES



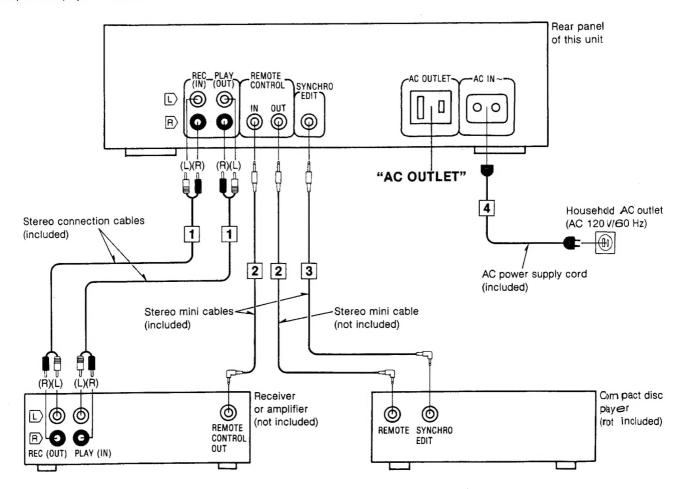
CONNECTIONS

Before making connections, be sure that the power to this unit and all other system components is turned off first.

See the operating instructions of the receiver (or amplifier) and the compact disc player for details.

Make connections in the numberd sequence by using the cables. **Note:**

Avoid letting the cables touch each other as much as possible, otherwise noise will be generated.



The following functions can be operated by remote control (When connected to the appropriate Technics receiver): Playback, Stop, Pause, Rewind/fast-forward search, Record, and 1-2 (A-B) deck selection.

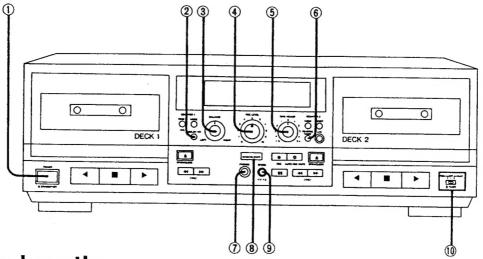
The REMOTE CONTROL "OUT" terminal is provided to connect a Technics Compact Disc Player or Graphic Equalizer. The REMOTE CONTROL and SYNCHRO EDIT terminal s can only be used with selected Technics Components. Pleasecontact your dealer for details.

"AC OUTLET" (UNSWITCHED: PP area o nly)

Power is always available, regardless of the unit's pover Switch setting.

Audio equipment rated up to 100 W can be connected.

LOCATION OF CONTROL



Control section

Controls common to both tape decks

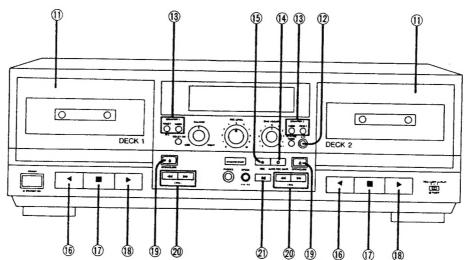
- 1) Power " (b) STANDBY/ON" switch (POWER, & STANDBY/ON)
- ② Dolby noise-reduction button (DOLBY NR) This button is used to reduce the hissing noise heard from the tape. This unit is provided with both the B-type and C-type noise-reduction systems.
- 3 Recording-balance control (BALANCE) This control is used to balance the left and right sound levels during recording
- Recording-level control (REC LEVEL) This control is used to regulate the recording level.
- ⑤ Bias-adjustment control (BIAS ADJUST) This control is used to equalize the frequency response during recording.

- ⑥ Reverse-mode selector (REVERSE MODE) This selector is used for selection of the reverse mode (for
- either playback or recording). ① Headphones jack (PHONES)
- Synchro-start button (SYNCHRO START) This button is used to start a tape-to-tape recording, simultaneously starting deck 1 (the playback deck) and deck 2 (the recording deck).
- Tape-to-tape recording-speed button (SPEED)

This button is used to select the recording speed during tape to-tape recording.

10 Timer switch (TIMER)

This switch is used to automatically begin a tape recording or tape playback at a certain time, selected by an optional timer.



Control section (continued)

Controls applicable to tape deck 1 and/or 2

(1) Cassette holder

② ATC button (ATC)

This button is used to perform ATC (auto tape calibration). (See page 6.)

(3) Tape counter buttons (COUNTER 1/COUNTER 2)

MODE: This button is used to select the tape/linear

counter indication.

RESET: This button is used to reset the tape counter in-

dication to "000__"/"00.00".

(Automatic-record-muting button (AUTO REC MUTE)

This button is used to make a silent interval on the tape while recording is in progress.

(15) Record button (● REC)

This button is used to set deck to the recording stand-by mode.

16 Reverse-side playback button (◄)

This button is used to start the playback or recording of side "B" of the cassette.

(The tape will move in the right-to-left direction.)

(7) Stop button (E)

This button is used to stop the tape movement.

Forward-side playback button (►)

This button is used to start the playback or recording of side "A" of the cassette.

(The tape will move in the left-to-right direction.)

Open/close button (▲ OPEN/CLOSE)

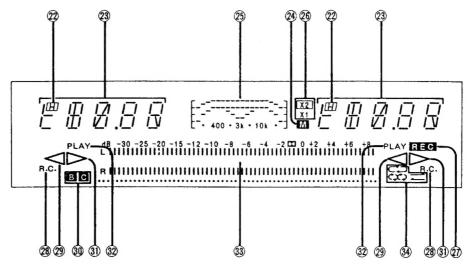
This button is used to open or close the cassette holder.

② Rewind/fast-forward search buttons (◄◄/▶► TPS)

These buttons are used to advance or rewind the tape, or to easily and quickly search for the program's beginning of the tape

② Pause button (II)

This button is used to temporarily stop the tape playback or recording.



Display section

② High-speed rewind/fast-forward search indicator (H)

Illuminates during high-speed rewind/fast-forward or high-speed search.

23 Tape counter/ATC display

Normally functions as the tape/linear counter display. During ATC (auto tape calibration), displays the status of the ATC operation.

24 ATC memory indicator (M)

Flashes during ATC (auto tape calibration), and then remains illuminated when the ATC operation is completed.

② ATC graphic display

Shows a graphic display of the ATC (auto tape calibration) operation.

Tape-to-tape recording-speed indicators (×1, [x2])

One of these indicators illuminates to show which of the tapeto-tape recording speeds was selected by pressing the tapeto-tape recording-speed button.

② Recording indicator (REG)

Illuminates to indicate that this unit is in the recording stand-by mode or is recording.

28 Remote-control indicator (R.C.)

Illuminates to indicate that this unit can now be controlled by the remote control transmitter of the appropriate reteiver connected.

② Reverse-side indicator (<) </p>

Illuminates during playback or recording to indicate that side "B" of the tape is being used.

30 Dolby noise-reduction indicators (B , C)

Each indicator illuminates to show the type of Ddby noise-reduction system selected by pressing the Dolby noise-reduction button.

③ Forward-side indicator (▷)

Illuminates during playback or recording to indicate that side "A" of the tape is being used.

32 Playback indicator (PLAY)

When this indicator illuminates steadily, it indicates that this unit is in the playback or recording mode.

When flashing, indicates that this unit is in the paus mode or in the recording stand-by mode.

33 Input level meter

During playback, this meter indicates the level of therescorded sound.

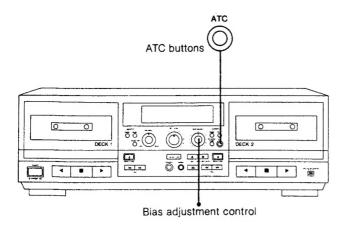
During recording, it indicates the level being record-ed, adjusted by the recording-level control.

③ Reverse-mode indicators (= , ← , ← , ← , ←)

Each indicator illuminates to show which of the revene modes was selected by the reverse-mode selector.

ABOUT THE ATC FUNCTION

ATC (auto tape calibration) is the function which identifies the quality of the tape (concerning bias, level, equalizer) automatically and sets the most desirable recording condition. It takes about 1 minute to complete the setting.



ATC will begin when the ATC button on the deck in which the cassette for recording is inserted is pressed.

Perform ATC while the other deck is in the stop (or rewind/fast-forward) mode.

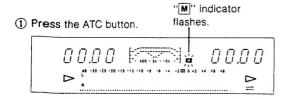
Because the ATC function records a test signal onto the tape, any previously recorded material will be erased, so be careful not to accidently erase material which you wish to save.

Although ATC can also be performed for a tape which is partly wound, it is not possible at the end of the tape. Although the tape will be wound back to its original position after ATC has been completed, the position may be slightly different from the exact original position. Therefore, perform ATC 2 seconds or more after the end of the previous track.

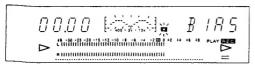
Be sure to set the bias adjustment control to 0.

The display changes as follows while the ATC setting is taking place.

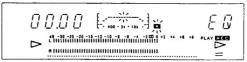
Example: Performing ATC on tape deck 2.



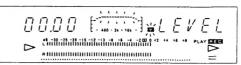
② Bias setting in progress.



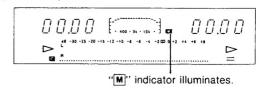
3 Equalizer setting in progress.



4 Level setting in progress.



⑤ ATC completed.



If the leader tape (attached to each end of recording tape) is reached during the above setting operations, the " M " indicator will rapidly flash on and off to indicate that ATC is not possible. Wind the tape to a position from which ATC can be performed and press the ATC button once again.

To cancel the ATC function while the settings are in progress:

Press the stop button.

To cancel the ATC settings after they have been made:

Press the ATC button. (The settings cannot be cancelled during recording.)

Notes:

ATC may not be possible on an old tape or on some special types of tapes.

The settings will be cancelled if the open/close button is pressed, so do not remove the tape cassette until recording has be en completed.

Unless the ATC settings are cancelled, they will be stored in memory even after the power has been switched to the standby condition (or the AC power supply cord has been discornected from the AC outlet).

■ DISASSEMBLY INSTRUCTIONS

"ATTENTION SERVICER"

Ref.No.

Some chassis components may have sharp edges. Be careful when disassembling and servicing.

 ${\cal O}_{oldsymbol{\Theta}}$

Procedure
1
Cabinet

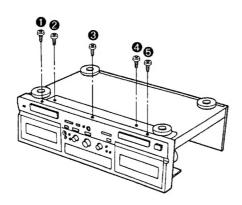
Removal of the cabinet

• Remove the 6 screws(1 ~ 6).

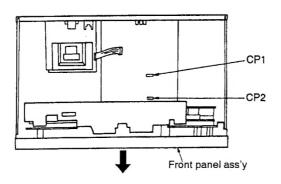
1 → 3

Ref.No. 3 Removal of the front panel ass'y

Procedure



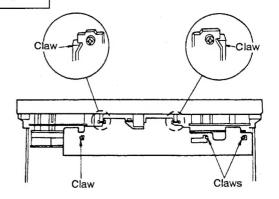
1. Remove the 5 screws(1 ~ 5).

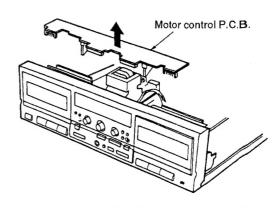


- 2. Remove the 2 connectors(CP1, CP2).
- 3. Remove the front panel ass'y in the direction of arrow.

Ref.No. 2 Removal of the motor control P.C.B.

Procedure 1 → 2





• Release the 5 claws and then remove the motor control P.C.B. in the direction of arrow.

Procedure

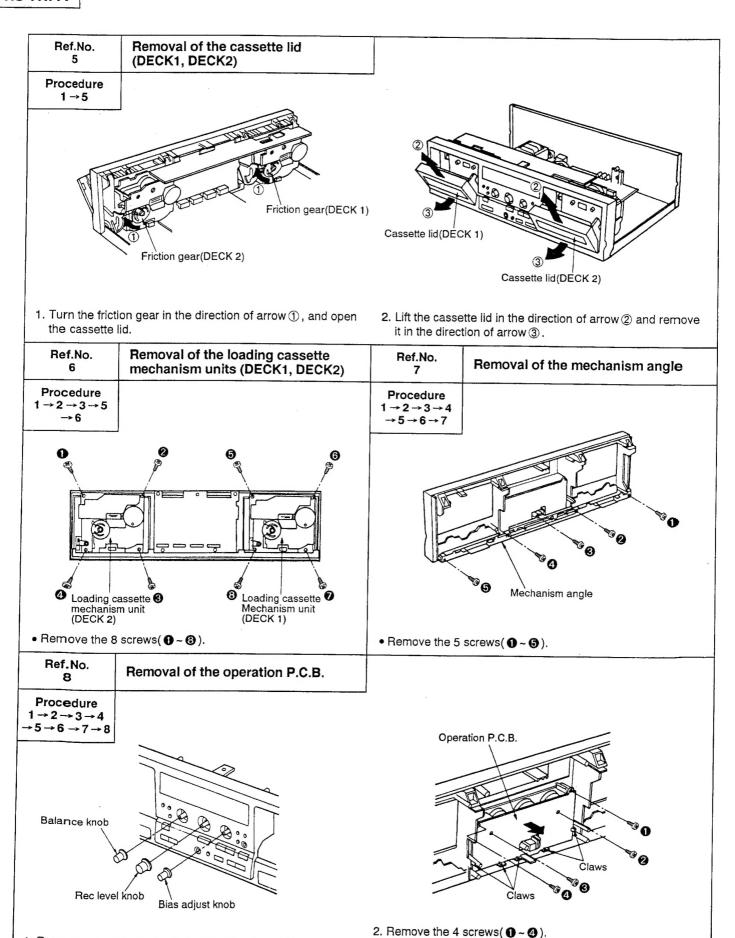
1 → 2 → 3 → 4

Claw

Claw

FL P.C.B.

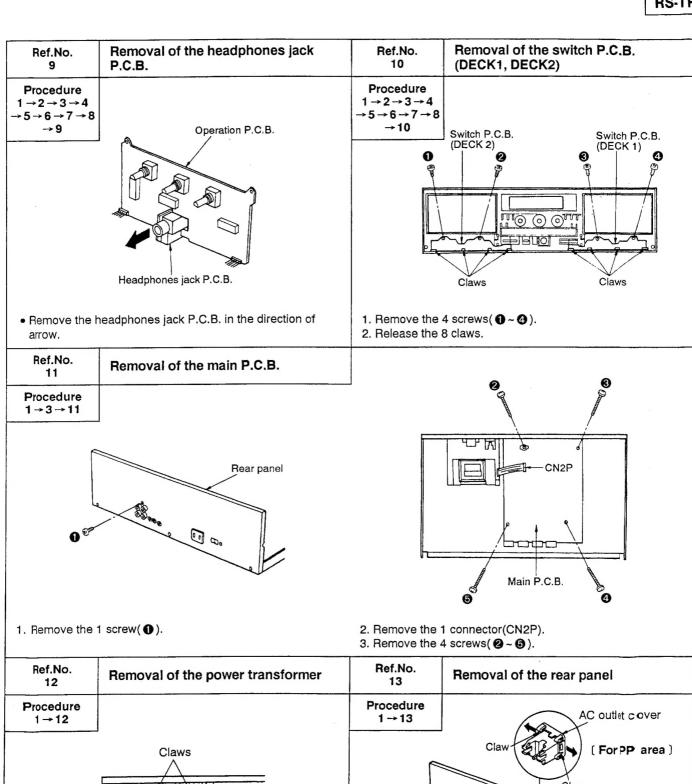
- 1. Remove the 4 screws(1 ~ 4).
- 2. Release the 1 claw and then remove the FL P.C.B. in the direction of arrow.



3. Release the 5 claws.

4. Remove the operation P.C.B. in the direction of arrow.

1. Remove the balance knob, rec level knob and bias adjust



- Claws

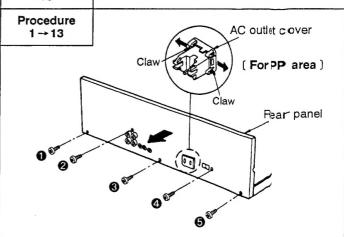
 Claw

 Claw

 Claw

 Claw

 Power transformer
- 1. Remove the 2 screws(1, 2).
- 2. Release the 4 claws.



- 2. Release the 2 claws of the AC outlet cover.(Forpp area.)
- 3. Remove the rear panel in the direction of arrow.

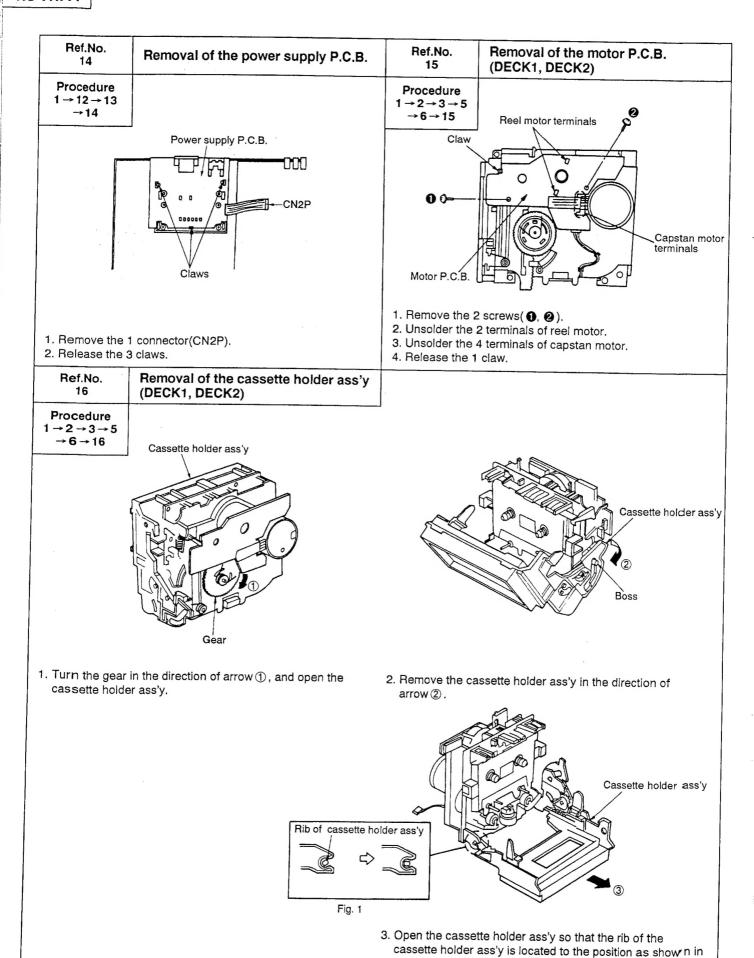
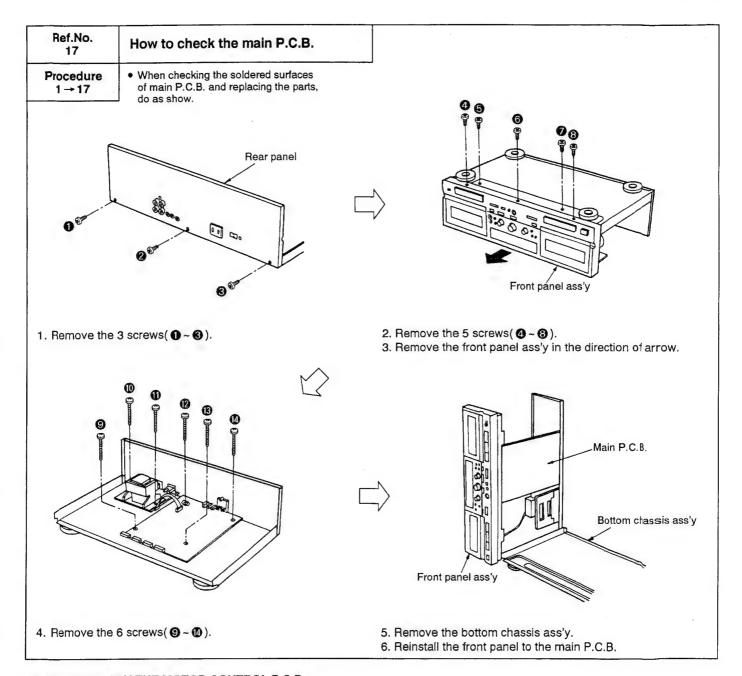
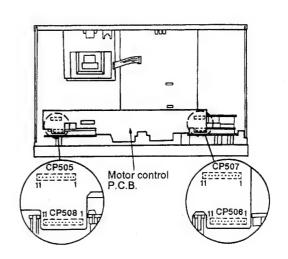


Fig 1., and then pull out it in the direction of arrow 3.



HOW TO CHECK THE MOTOR CONTROL P.C.B.

 For troubleshooting described on page 17~20, check the unit by using connectors as shown below.



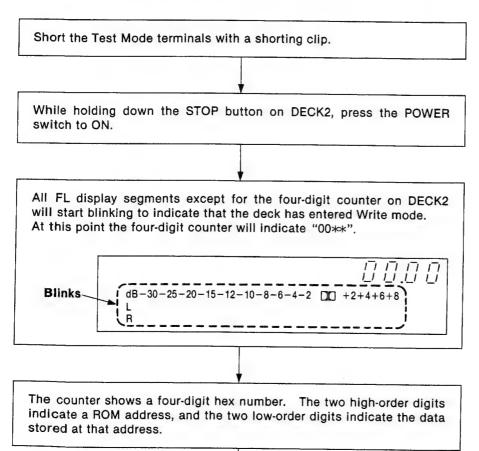
MADJUSTMENT PROCEDURE

This unit holds recording bias and equalization data in its EEPROM chip. An internal CPU automatically adjusts playback gain, recording bias, overall gain, and overall frequency response according to the ROM data. Manual adjustment with potentiometers is no longer necessary except for head azimuth and tape speed. All other items require only measurement data checks.

The adjustment and checkout procedures are as follows.

Writing to EEPROM

The EEPROM chip holds the optimal recording bias and equalization data. If the chip has been replaced, be sure to write to it, following the steps below:



Set these digits using the FF or REW button.

Ü

0 0

The high- and low-order digits of the address increment alternately each time the FF button is pressed. The REW button causes these digits to decrement alternately.

For fast incrementing or decrementing, hold down the FF or REW button.

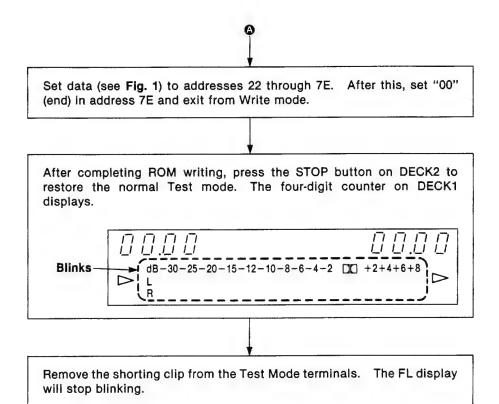
-Set these digits using the F. PLAY or R. PLAY button. The high- and low-order digits of the data increment alternately each time the F. PLAY button is pressed. The R. PLAY button causes these digits to decrement alternately. For fast incrementing or decrementing, hold down the F. PLAY or R. PLAY button.

Example: Set "FF" in address 56 (see Fig. 1).

Set these digits to "FF" using the F. PLAY or R. PALY button.

Set these digits to "56" using

the FF or REW button.



High Low	0	1	2	3	4	5	6	7
0	_	_	_	_	В0	68	30	88
1		_	_		00	78	68	68
2			D0	68	— ; · ·	38	В0	FF
3	_	_	80	78	_	64	6C	В0
4	-		E0	38		A8	FF	C4
5		_	7C	64	_	50	A0	1C
6	_	_	FB	A8	80	FF	ВА	68
7	_	_	F5	00	58	74	2C	78
8		-	0F	_	18	B8		50
9	_	_	2B		80	30	_	72
Α	_		12	_	88	_		4A
В			07	_	96	_		55
C	_	_		84		_	80	_
D	_	_		60	_		58	_
E	_	_	-	30	_	84	18	00
F	_	_	_	68	_	60	80	_

Fig. 1

MEASUREMENTS AND ADJUSTMENTS

Measurement Condition

- Rec. level control; Maximum
- Timer switch; Off
- Recording-balance control; Center
- · Bias-adjustment control; Center
- Tape-to-tape recording-speed switch; Off
- · Dolby NR switch; Off
- ATC switch; Off

Measuring instrument

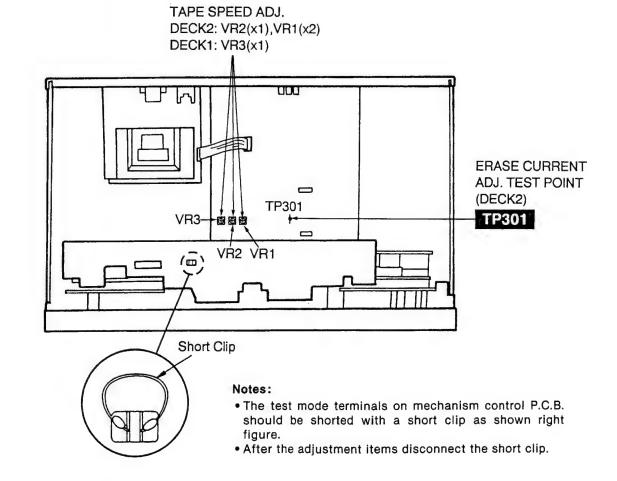
- EVM (Electronic Voltmeter)
- Oscilloscope
- Digital frequency counter
- AF oscillator

Test tape

- Head azimuth adjustment (8kHz, -20dB); QZZCFM
- Tape speed adjustment (3kHz, -10dB); QZZCWAT
- Playback frequency response (315 Hz, 12.5 kHz, 10 kHz, 8 kHz, 4 kHz, 1 kHz, 250 Hz, 125 Hz, 63 Hz, -20 dB); QZZCFM

- Make sure heads are clean
- Make sure capstan and pressure roller are clean
- Judgeable room temperature 20±5°C (68±9°F)
- ATT (Attenuator)
- DC voltmeter
- Resistor (600Ω)
- Playback gain adjustment (315Hz, 0dB); QZZCFM
 Overall gain adjustment and Overall frequency response
- Normal reference blank tape; QZZCRA CrO₂ reference blank tape; QZZCRX Metal reference blank tape; QZZCRZ

Adjustment Points



HEAD AZIMUTH ADJUSTMENT (DECK 1/2)

- Playback the azimuth adjustment portion (8kHz, -20dB) of the test tape (QZZCFM). Vary the azimuth adjusting screw until the output of the R-CH are maximized.
- 2. Perform the same adjustment in the play mode.
- 3. Repeat the same check in reverse play mode.
- After the adjustment, apply screwlock to the azimuth adjusting screw.

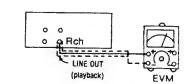


Fig. 1

E. HEAD (DECK 2)

P. HEAD (DECK 1)

R/P. HEAD (DECK 2)

Azimuth Screw
(Forward)

Azimuth Screw
(Reverse)

Fig. 2

TAPE SPEED ADJUSTMENT (DECK 1/2)

Normal speed

- 1. Playback the middle portion of the test tape (QZZCWAT).
- Adjust Deck 1=VR3 and Deck 2=VR2 so that the output is within the standard value.

Standard value: 3000 ± 15 Hz (NORMAL speed)

High speed [Set the unit to forward (FWD) mode.]

- Press the tape-to-tape recording-speed selector switch (X2) button.
- This will set the high speed mode.
- 4. Playback the middle portion on the test tape (QZZCWAT).
- At that time, check if the output from DECK 1 is within the standard value.

Standard value: 6000 ± 600 Hz (HIGH speed)

 Adjust VR1 so that the output frequency of DECK 2 is within ±30 Hz for the value of the output frequency of DECK 1.

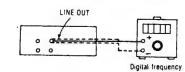


Fig. 3

PLAYBACK GAIN ADJUSTMENT (DECK 1/2)

- 1. Set the AF oscillator's output frequency to 315Hz.
- 2. With no tape loaded in the deck, press and hold the REC button on DECK2. Adjust the test signal level using the Rec. Level and Balance controls until the line output levels on both channels are 320mV. When the adjustment is complete, release the REC button. (The deck stores the data at the moment the REC button is released.)
- 3. Load the test tape (QZZCFM) into the deck and locate the part where the playback gain test tone (315Hz, 0dB) is recorded. Press the ATC button, then the FWD PLAY button. (At this point the deck automatically adjusts the playback gains on both forward and reverse sides.) After this, play back the tape and verify that the output level falls in the specified range.
- Perform the adjustment described in step 3 above for both DECK1 and DECK2.

Standard value: 320 mV ± 0.5 dB

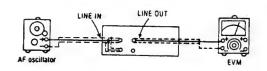
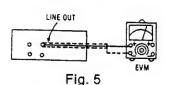


Fig. 4

PLAYBACK FREQUENCY RESPONSE (DECK 1/2)

- 1. Playback the frequency response portion (315Hz, 12.5kHz~63Hz, -20dB) of the test tape (QZZCFM).
- 2. Assure that the frequency response is within the range shown in Fig. 6 for both L-CH and R-CH.



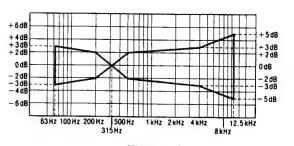


Fig. 6

ERASE CURRENT ADJUSTMENT (DECK 2)

- Insert the Metal blank test tape (QZZCRZ) and set the unit to the Record Pause mode.
- Check if the output at this time between the erase current confirmation point output TP301 and GND (chassis) (the output on both edges of R308) is within the standard value.

Standard value: 180 ± 20 mA (Metal)...EVM Reading: 180 ± 20 mV

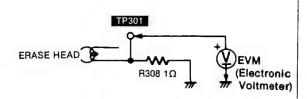


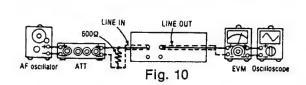
Fig. 7

OVERALL GAIN ADJUSTMENT AND OVERALL FREQUENCY RESPONSE (DECK 2)

- Load a Normal blank test tape (QZZCRA) into the deck under test. Press the ATC button, then the REC button. (At this point the deck automatically adjusts the overall gain and frequency response.)
- With the deck placed in Record. Pause mode, apply the reference test signal (1kHz) to the Rec. input and adjust the output level to 320mV with the attenuator (ATT). After this, start recording.
- While playing back the reference signal just recorded, verify that the output level falls in the following range.

Standard value: 320 mV ± 0.5 dB

- 4. Apply test signals (with the specified test frequencies covering the range from 50Hz to 10kHz) whose levels are 20dB lower than the reference signal level (1kHz) to the Rec. input and record these signals in sequence.
- Play back the test signals just recorded and verify that the levels at the test frequencies fall in the ranges specified in Fig. 8 with respect to the reference signal level.
- 6. Repeat steps 4 and 5 above for CrO₂ blank test tape (QZZCRX) and Metal blank test tape (QZZCRZ), in these cases raising the upper end of the test signal frequency range to 12.5kHz. Verify that the signal levels at the test frequencies fall in the ranges specified in Fig. 9 with respect to the reference signal level.
- Steps 1 through 4 above are concerned with overall gain; steps 5 through 7 pertain to overall frequency response.



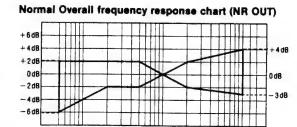


Fig. 8

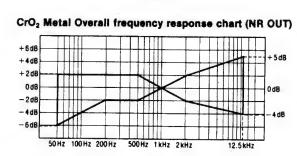
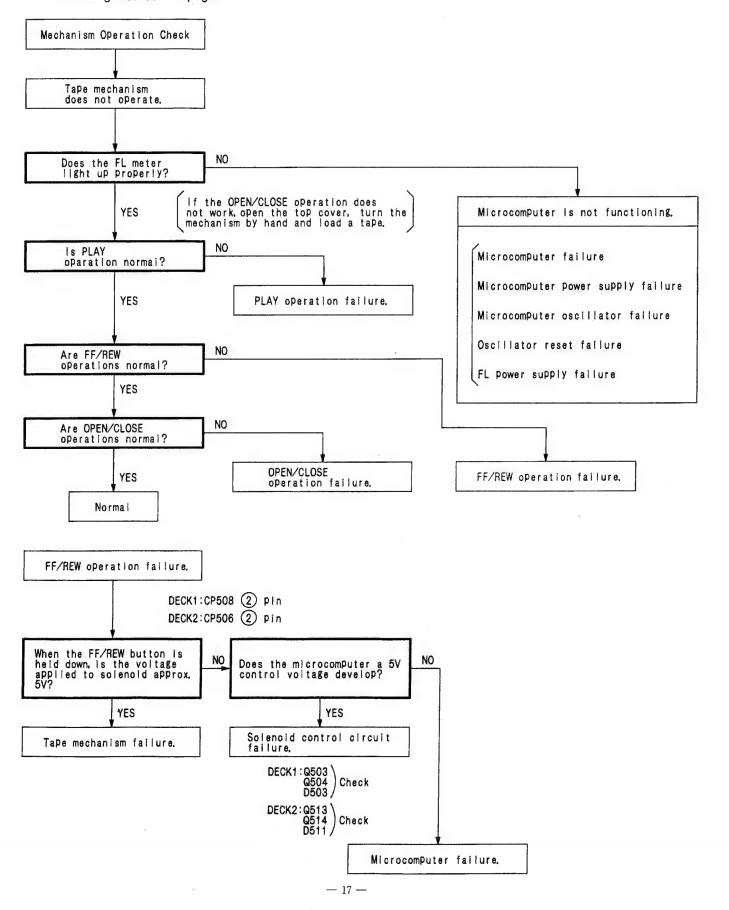
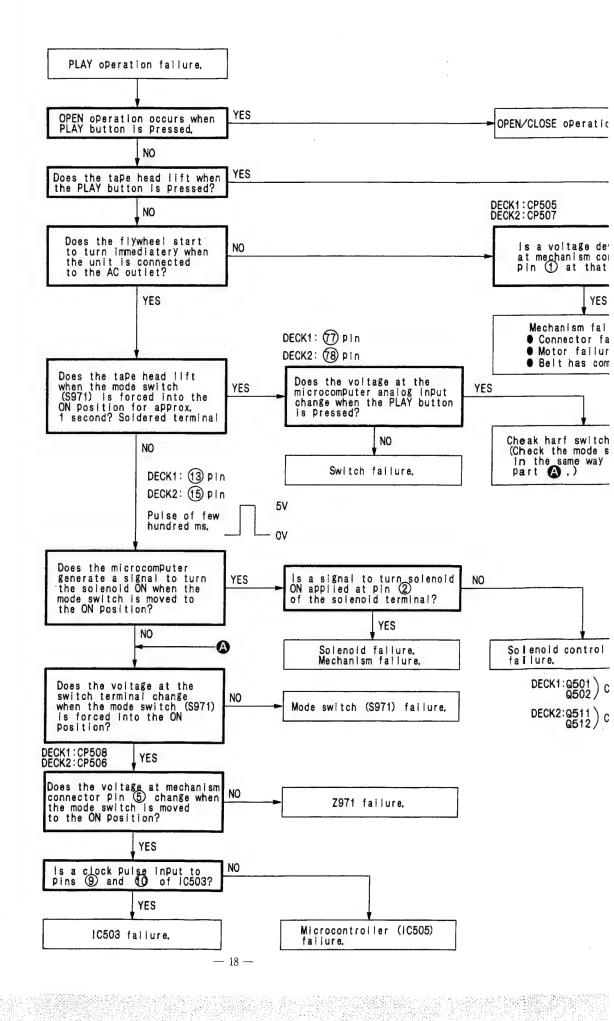


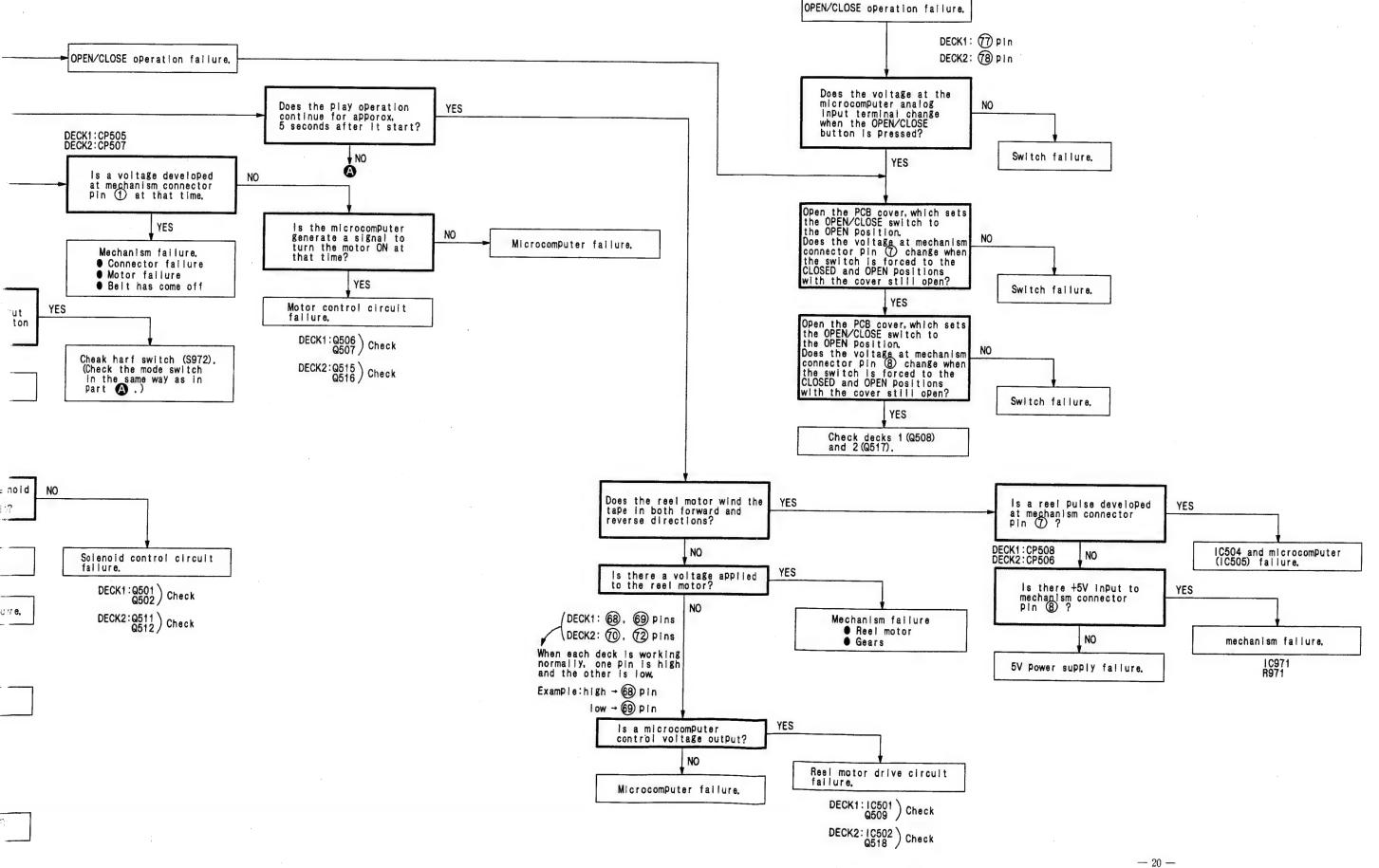
Fig. 9

TROUBLESHOOTING GUIDE

*To perform troubleshooting, set the unit to the state described in the "Motor Control PCB Checking Method" on page 11.







TERMINAL FUNCTION OF IC

• IC505 (M38172M4065F): MICROCOMPUTER

*To check the contents of the item "%" in the IC terminal table, set the unit to the state described in the "Motor Control PCB Checking Method" on page 11.

Pin No.	Mark	I/O Division	Function	Check point	※ Discription
1	RCH	1	Rch indication level input	Connector CP3 ② pin	0V with no signal and 1V with 0VU (-20dB) input in the REC or PAUSE mode. The voltage varies from 0 to 5V for different input levels.
2	BIAS	1	Bias adj. V.R input	Connector CP701 ③ pin	Bias ADJ. Vol. min
3	MECHA1	ı	Deck 1 leader tape det., mechanism switch	Connector CP502 ③ pin	(ex) The waveform should vary with the type of tape and the tape speed of deck 1.
4	MECHA2	ļ	Deck 2 leader tape det., mechanism switch	Connector CP502 ④ pin	(ex) The waveform should vary with the type of tape and the tape speed of deck 2.
5	SELA	0	Mecha. input selector signal output 1 (B) ON: "L", OFF: "H"	Connector CP502 ® pin	5V 8ms
6	SELB	o	Mecha. input selector signal output 2 (A) ON: "L", OFF: "H"	Connector CP502 ⑤ pin	2ms 5V 0
7	RPT1	I	Deck 1 reel pulse det. input (take up side)	Connector CP502 ⑦ pin	Changes within the 0 ↔ 5V range each time the take up reel on deck 1 is through approximately 30 degrees.
8	RPS1	I	Deck 1 reel pulse det. input (supply side)	Connector CP502 ® pin	Supply reel on deck 1
9	RPT2	1	Deck 2 reel pulse det. input (take up side)	Connector CP502 (9) pin	Take up reel on deck 2
0	RPS2		Deck 2 reel pulse det. input (supply side)	Connector CP504 ① pin	Supply reel on deck 2
1	HSPD1		Deck 1 high speed take up selector output	Connector CP504 ② pin	"H" (=5V) when deck 1 is in the high-speed FF/REW or TPS mode and "L" (=0V) in other modes.
2	HSPD2	1 1	Deck 2 high speed take up selector output	Connector CP504 ③ pin	"H" (=5V) when deck 2 is in the high-speed FF/REW or TPS mode and "L" (=0V) in other modes.

Pin No.	Mark	I/O Division	Function	Check point	※ Discription
13	SOL1	0	Deck 1 plunger trigger control output ON: "H", OFF: "L"	Connector CP504 ④ pin	"H" (=5V) for a period of a few tens to a few hundreds of milliseconds when deck 1 changes from stop mode to play mode and vice versa. When deck 1 changes from stop mode to FF/REW mode, this terminal generals "H" pulses twice for a period of a few tens to a few hundreds of milliseconds.
14	CSOL1	0	Deck 1 plunger keep control output ON: "H", OFF: "L"	Connector CP504 ⑤ pin	"H" (=5V) when deck 1 is in FF/REW mode.
15	SOL2	0	Deck 2 plunger trigger control output ON: "H", OFF: "L"	Connector CP504 6 pin	Same as 13 above for deck 2.
16	CSOL2	0	Deck 2 plunger keep control output ON: "H", OFF: "L"	Connector CP504 ⑦ pin	Same as 14 above for deck 2.
17	osc	0	Audio signal for adjustment output ON: "H", OFF: "L"	Connector CP3 ® pin	Generates signals at approx. 400 Hz, 10 kHz and 3 kHz (square wave (H and L, 0 and 5 V) in REC mode during adjustment of ATC).
18	MODEL	1	Model selector input ON: "L", OFF: "H"	Connector CP5 (4) pin	5 V
19	LFADJ	0	Low frequency rec. adj. output ON: "H", OFF: "L"	Connector CP3 ① pin	Normally "L" (=0 V) H and L are switched every 0.4s in the REC mode during adjustment of ATC. Becomes "H" (=5 V) in level mode.
20	PBADJ	0	Playback adj. output ON: "H", OFF: "L"	Connector CP3 ® pin	Used for adjustment at factory but in the finished product. Remains at "L" (=0 V).
21	MSP	l	TPS signal det. input ON: "L", OFF: "H"	Connector CP3 (9) pin	TPS mode No program: "H" (=5V) Programs: "L" (=0V)
22	SYNC	I	CD syncro start signal input ON: "L", OFF: "H"	Connector CP6 (9) pin	"L" (=0V) via cable from CD at the start of CD sync; "H" in other modes.
23	REMOCON		Remocon signal input ON: "H", OFF: "L"	TRANSISTOR Q526 collector	H and L pulse waveform appears on the input of a remote control signal.
24	CLK	0	Serial clock for serial data output ON: "H", OFF: "L"	Connector CP3 (1) pin	A few µs A few ms 5V Constant pulse output
25	DATA	0	Serial data for amp control output ON: "H", OFF: "L"	Connector CP4 ① pin	Data output in response to CLK above
26	POF	1	Power off det. input ON: "H", OFF: "L"	Connector CP4 ② pin	Rectified waveform at both 50 and 60 Hz (clamping at 5V)

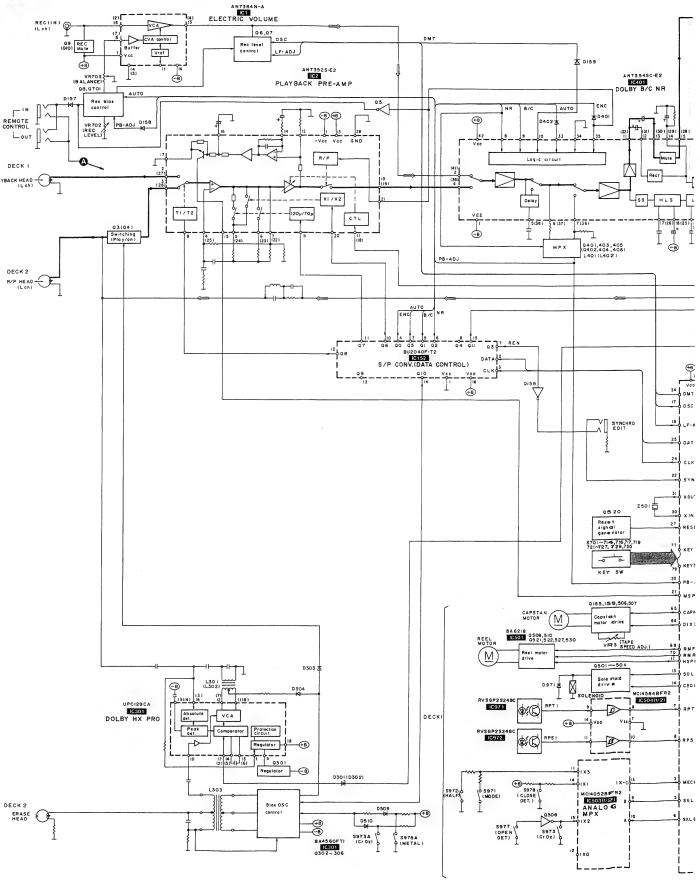
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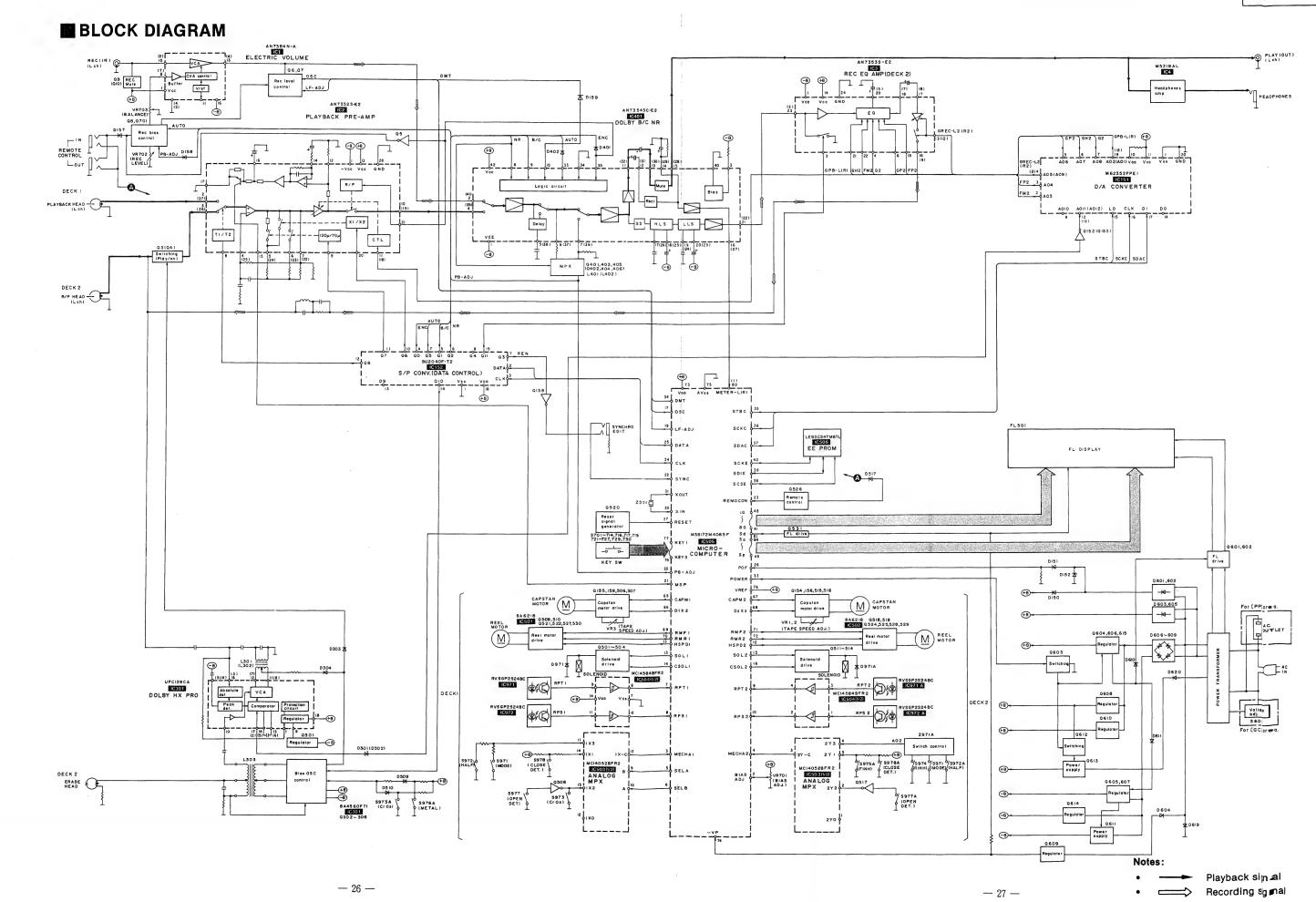
Pin No.	Mark	I/O Division	n Function	Check point	※ Discription
27	RESET	ı	Reset input ON: "L", OFF: "H"	TRANSISTOR Q520 collector	Usually H (=5V) but L for a period of a few to a few tens of milliseconds is first plugged in when the player
28	XCIN	1	Not used	_	
29	хсоит	0	Not used	_	
30	XIN	I	Microcomputer clock OSC terminal	Z501 DECK 2 MECHA. side terminal	Oscillator waveform at 6 MHz
31	XOUT	0	Microcomputer clock OSC terminal	Z501 DECK 1 MECHA. side terminal	Oscillator waveform at 6MHz
32	V _{ss}	_	Microcomputer GND	Connector CP5 ② pin	ov
33	POWER	0	Power control output ON: "H", OFF: "L"	Connector CP4 ③ pin	Power ON: "H" (=5V) Power OFF: "L" (=0V)
34	DMT	0	Line out mute signal output ON: "L", OFF: "H"	Connector CP4 ④ pin	"L" (=0V) when sound is being produced in the play or REC mode and "H" (=5V) when no sound is produced in the stop or FF/REW mode.
35	STBC	0	DA converter strove signal output ON: "H", OFF: "L"	Connector CP4 (3) pin	A few μs A few hundred μs 5V Usually
36	SDAC	0	DA converter data output ON: "L", OFF: "H"	Connector CP4 ® pin	A few hundred μs 5V Usually
37	SCKC		DA converter serial clock output ON: "L", OFF: "H"	Connector CP4 ⑦ pin	A few hundred μs 5V Usually
38	STBE		E2PROM strove signal output ON: "H", OFF: "L"	Connector CP707 ③ pin	(exFOR ↔ REV PLAY mode is changed)

Pin No.	Mark	I/O Division	Function	Check point	※ Discription
39	SE2P	I/O	E2PROM serial data input/output	Connector CP707 ② pin	(exFOR ↔ REV PLAY mode is changed) Waveform appears in response to 38 above.
40	SCKE	0	E2PROM serial clock output ON: "L", OFF: "H"	Connector CP707 ① pin	Waveform appears in response to 38 above.
41 \$ 48	8G	0	FL meter glid output ON: "H", OFF: "L"	FL501 ⑤~⑫ pin	About 4ms 0.5ms 0+5V -20V
49 5 64	Sp \ Sa	0	FL meter segment output ON: "H", OFF: "L"	F5501 13~29 pin	+5V -20V H for 0~8 pulses of duration approx. 0.5 ms each.
65	CAPM1	0	Deck 1 capstan motor ON/OFF control output ON: "H", OFF: "L"	Connector CP503 ® pin	DECK 1 STOP mode: "L" (=0V) PLAY mode:"H" (=5V)
66	SPD1	0	Deck 1 motor speed selector output ON: "H", OFF: "L"	Connector CP5 (1) pin	X2 Edit mode (DECK 1 motor): "L" Other: "H"
67	CAPM2	0	Deck 2 capstan motor ON/OFF control output ON: "H", OFF: "L"	Connector CP503 ⑦ pin	DECK 2 STOP mode: "L" (=0V) PLAY mode: "H" (=5V)
68	SPD2	0	Deck 2 motor speed selector output ON: "H", OFF: "L"	Connector CP6 ① pin	X2 Edit mode (DECK 2 motor): "L" Other: "H"
69	RMF1	0	Deck 1 reel motor control output (+) ON: "H", OFF: "L"	Connector CP503 ® pin	DECK 1 STOP F. PLAY R. PLAY
70	RMR1	0	Deck 1 reel motor control output (-) ON: "H", OFF: "L"	Connector CP503 (9 pin	RMF1 L H L RMR1 L L H
71	RMF2	0	Deck 2 reel motor control output (+) ON: "H", OFF: "L"	Connector CP502 ① pin	DECK 2 STOP F. PLAY R. PLAY
72	RMR2	0	Deck 2 reel motor control output (-) ON: "H", OFF: "L"	Connector CP502 ② pin	STOP F.PLAY R.PLAY RMF2 L H L RMR2 L L H
73	V _{cc}	1	Power supply terminal (A/D)	Connector CP5 ③ pin	+5V
4	V _{EE}	ı	FL meter pull down voltage input terminal	Connector CP5 (9) pin	-20 V

Pin No.	Mark	I/O Division	Function	Check point	※ Discription
75	AV _{ss}	_	GND terminal (A/D)	Connector CP5 ② pin	ov
76	V _{REF}	ı	Reference power supply (+5V) (A/D)	Connector CP5 (4) pin	+5V
77	KEY1	l	Key switch input	Connector CP702 ③ pin	+5V without key input on deck 1 and 0V with the stop key ON. An analog value (0~5V) is used for each key ON.
78	KEY2	l	Key switch input	Connector CP702 ④ pin	$+5V$ without key input on deck 2 and 0V with the stop key ON. An analog value (0 \sim 5V) is used for each key ON.
79	KEY3	ı	Key switch input	Connector CP701 ② pin	An analog value from 0 to 5V appears when an input key for power, sync start, X1/X2, NR, reverse, modification or timer switch is pressed. +5V without any key inputs and 0V with the power key ON.
80	LCH	ı	Lch indication level input	Connector CP3 ① pin	0V with no signal and approx. 1V with 0VU (120dB) input. The voltage varies from 0 to 5V for different input levels.

■ BLOCK DIAGRAM





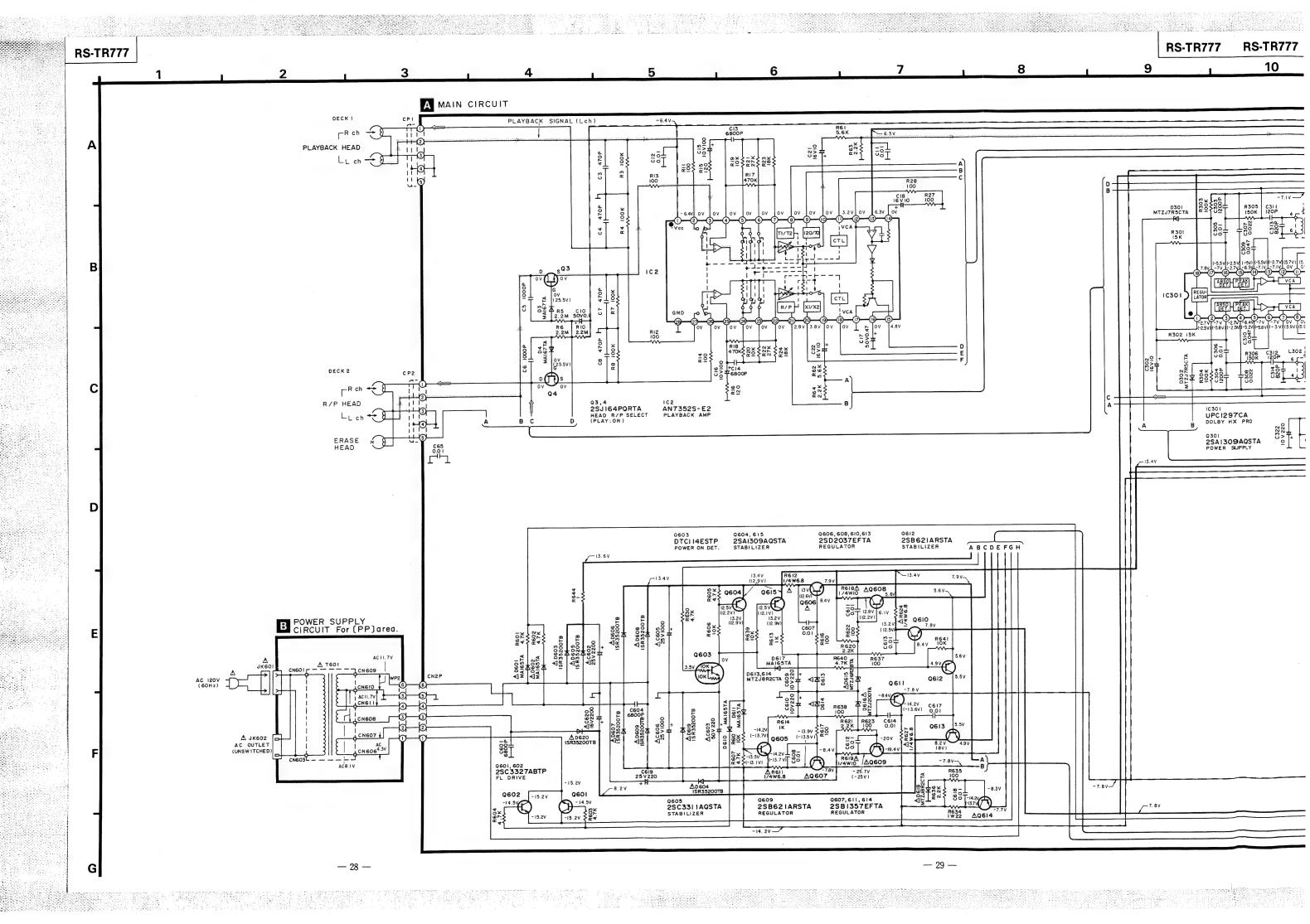
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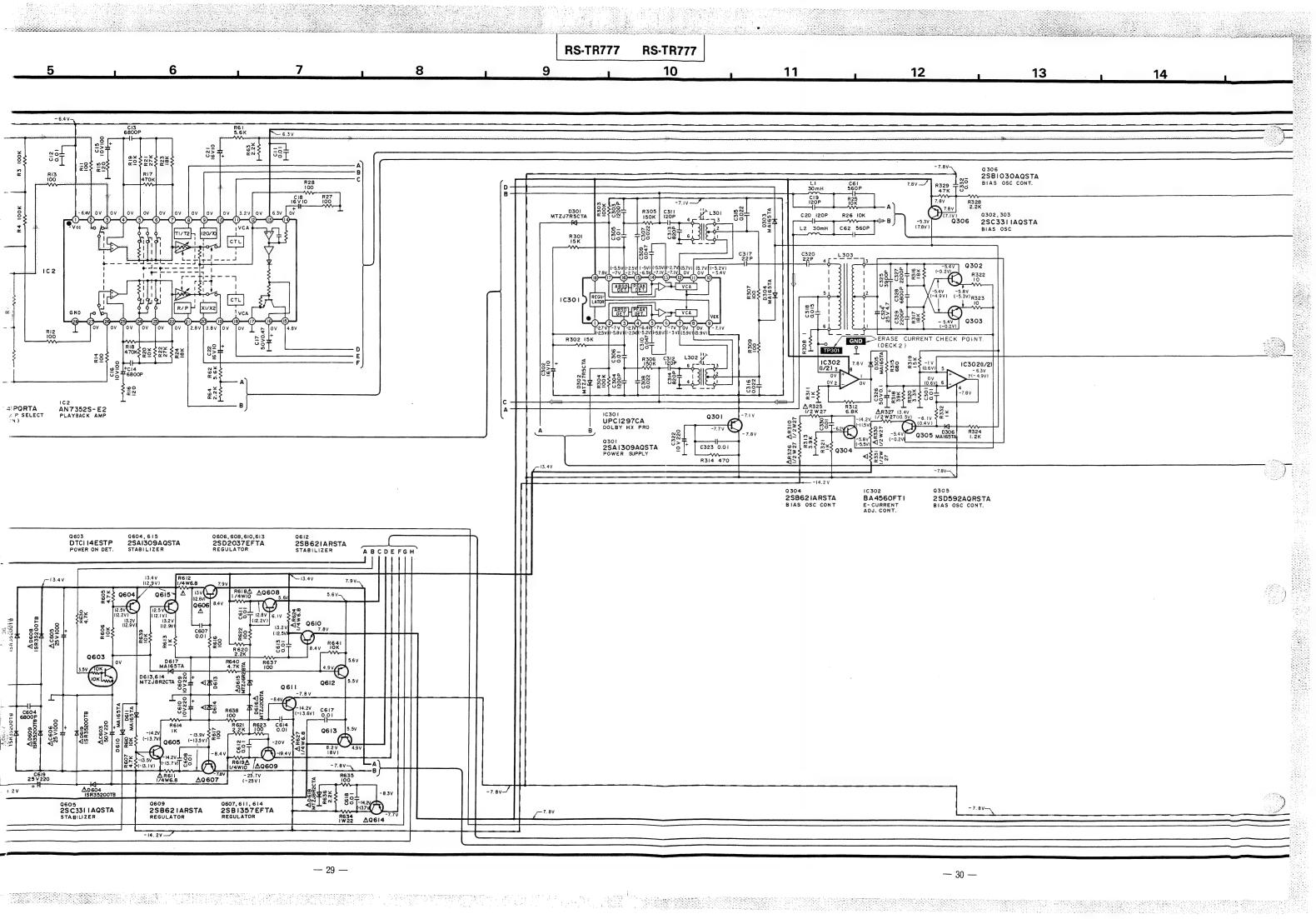
each key

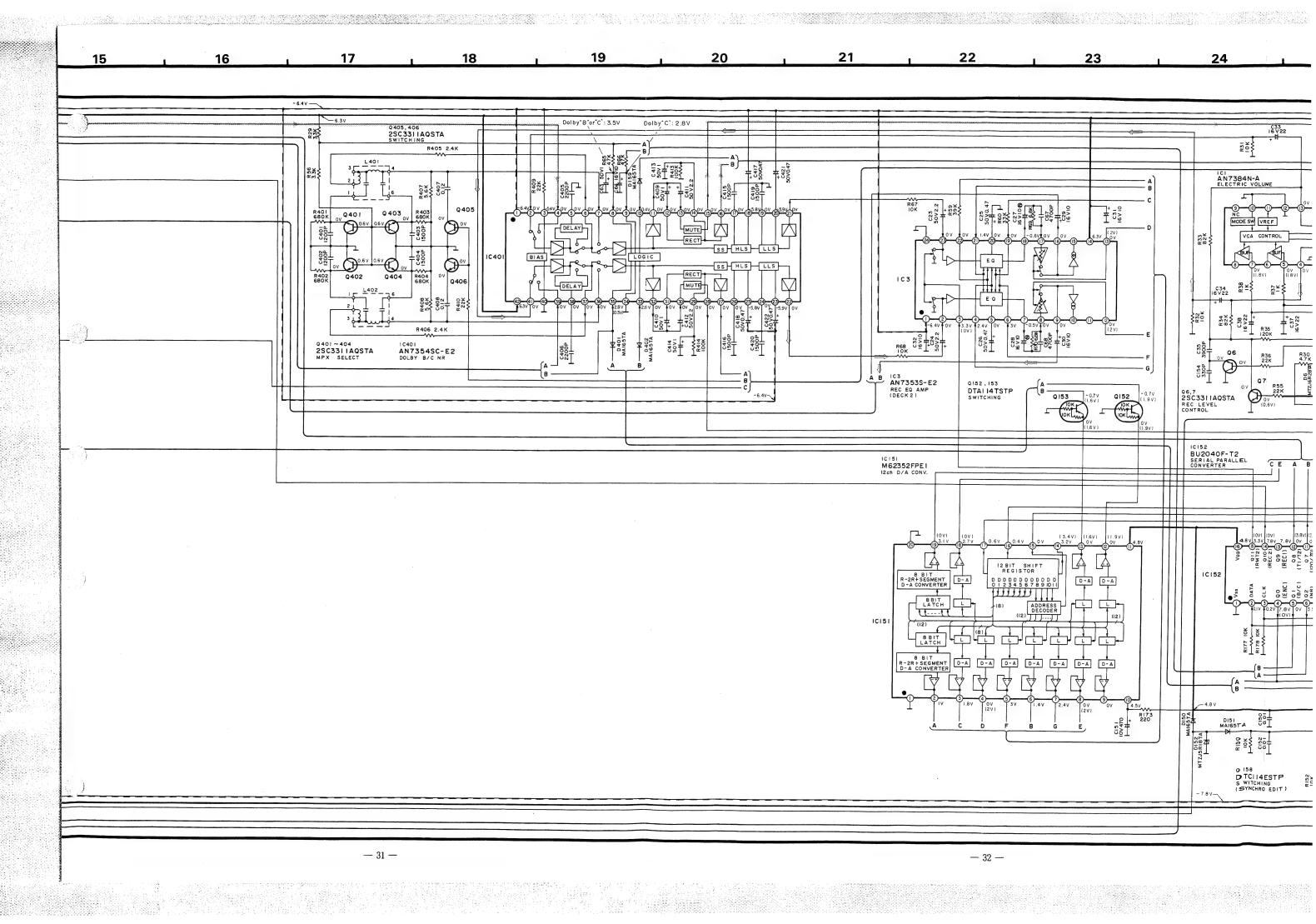
and 0V with (0∼5V) is

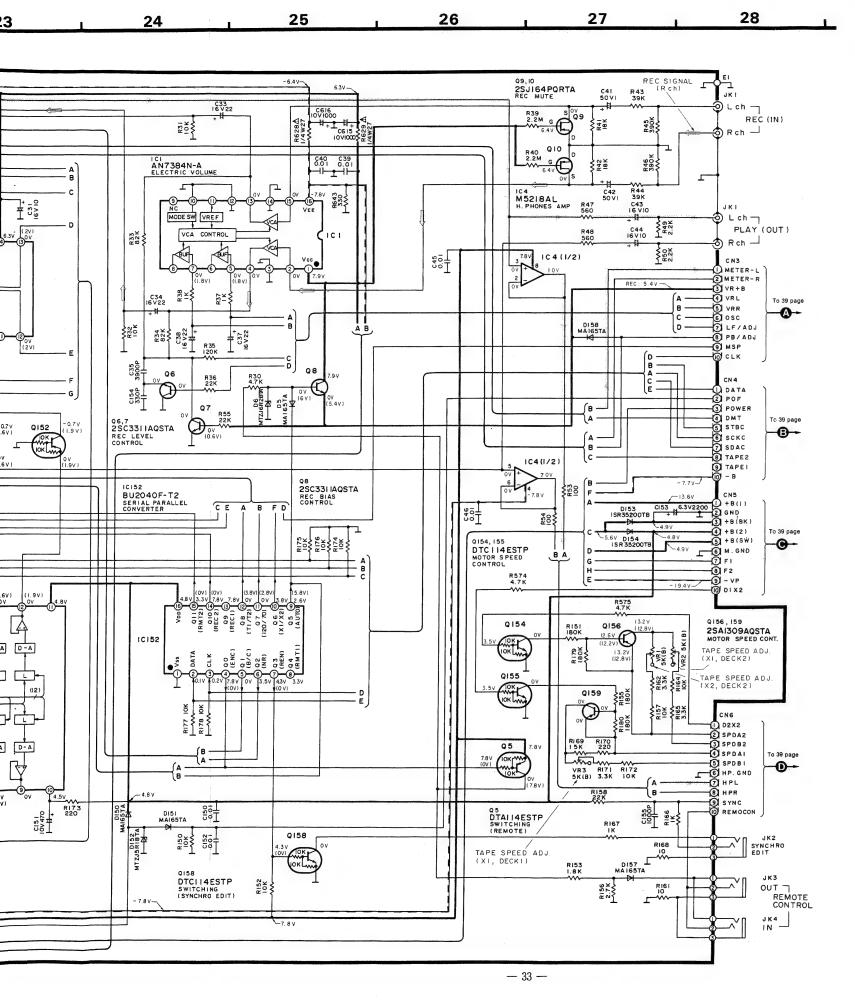
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SCHEMATIC DIAGRAM (Parts list on pages 59~63.)

(This schematic diagram may be modified at any time with the development of new technology.)

Note 1:

- S601: Voltage selector in "240 V" position. (For [GC] area only.) (110 V ↔ 127 V ↔ 220 V ↔ 240 V)
- Resistance are in ohms (Ω) , 1/4 watt unless specified otherwise.
- $1 K = 1,000 (\Omega), 1 M = 1,000 k (\Omega)$
- Capacity are in micro-farads (µF) unless specified otherwise.
- All voltage values shown in circuitry are under no signal condition and playback mode with volume control at minimum position otherwise specified.
- ()........Voltage values at record mode.

For measurement us EVM.

- Important safety notice
- Components identified by \triangle mark have special characteristics important for safety. When replacing any of these components, use only manufacturer's specified parts.
- (+B>) indicates +B (bias).
- (====) indicates -B (bias).
-) indicates the flow of the playback signal.
 -) indicates the flow of the record signal.
- The supply part number is described alone in the replacement parts list,

Ref. No.	Production Part No.	Supply Part No.
IC1	AN7384N-A	AN7384
IC4	M5218AL	M5218L
IC302	BA4560FT1	SVIBA4560FT1

Caution!

IC and LSI are sensitive to static electricity.

Secondary trouble can be prevented by taking care during repair.

- Cover the parts boxes made of plastics with aluminum foli.
- Ground the soldering iron.
- Put a conductive mat on the work table.
- \bullet Do not touch the legs of IC or LSI with the fingers directly.

28

REC (IN) 🖒 L ch 🦳 PLAY (OUT) ð Roh → C N3 METER-L METER-R (4) VRL S VRR -**A**-(osc - D LF/ADJ - B PB/ADJ (9) MSP Ø C L K CN4 DATA POF OR POWER -(a) DMT -(a) STBC -B-- SDAC - B) TAPE2 +B(BK) +B(2) -0---**(**6) M . GND Q156,159 2SAI309AQSTA MOTOR SPEED CONT TAPE SPEED ADJ. TAPE SPEED ADJ. D2X2 31 SP082 SPDAL (5) SPD81 0-8 HPR SYNC

SCHEMATIC DIAGRAM (Parts list on pages 59~63.)

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- () indicates the flow of the record signal.
- The supply part number is described alone in the replacement parts list,

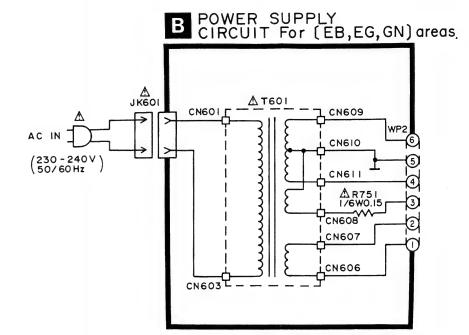
Ref. No.	Production Part No.	Supply Part No.
IC1	AN7384N-A	AN7384
IC4	M5218AL	M5218L
IC302	BA4560FT1	SVIBA4560FT1

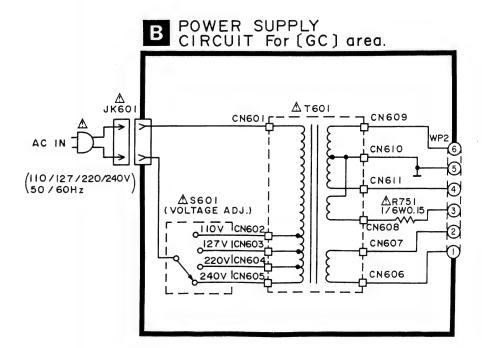
Caution!

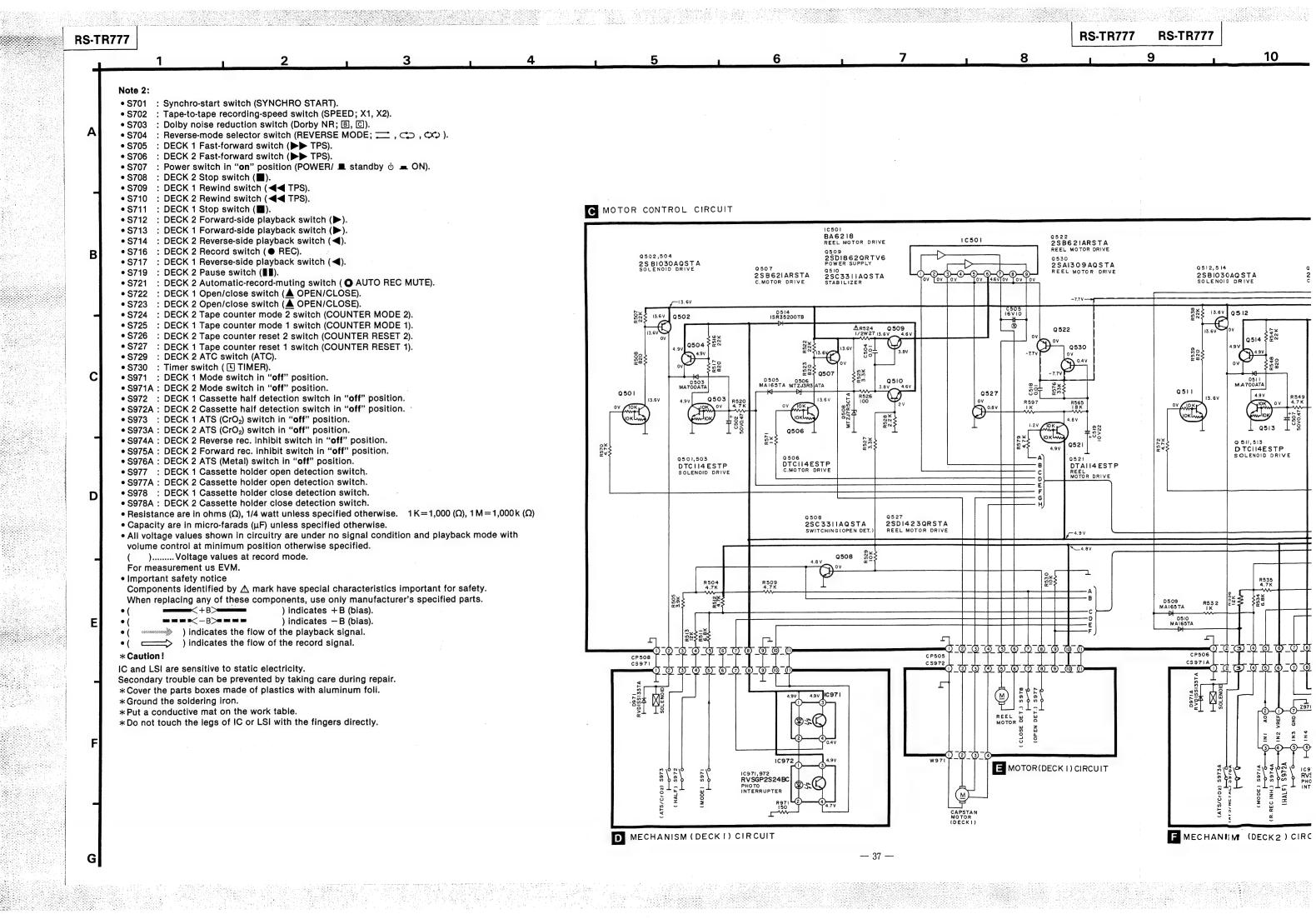
IC and LSI are sensitive to static electricity.

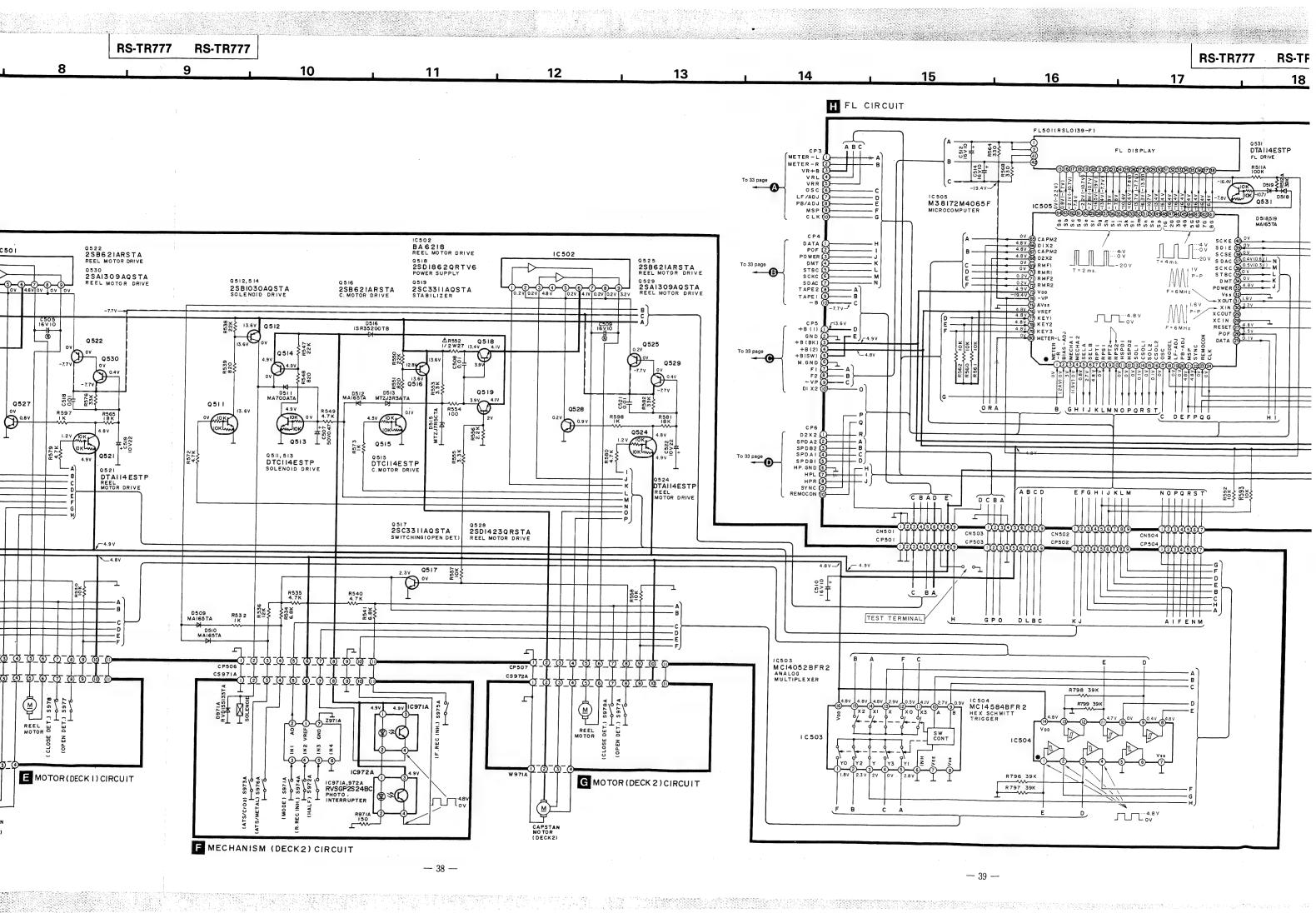
Secondary trouble can be prevented by taking care during repair.

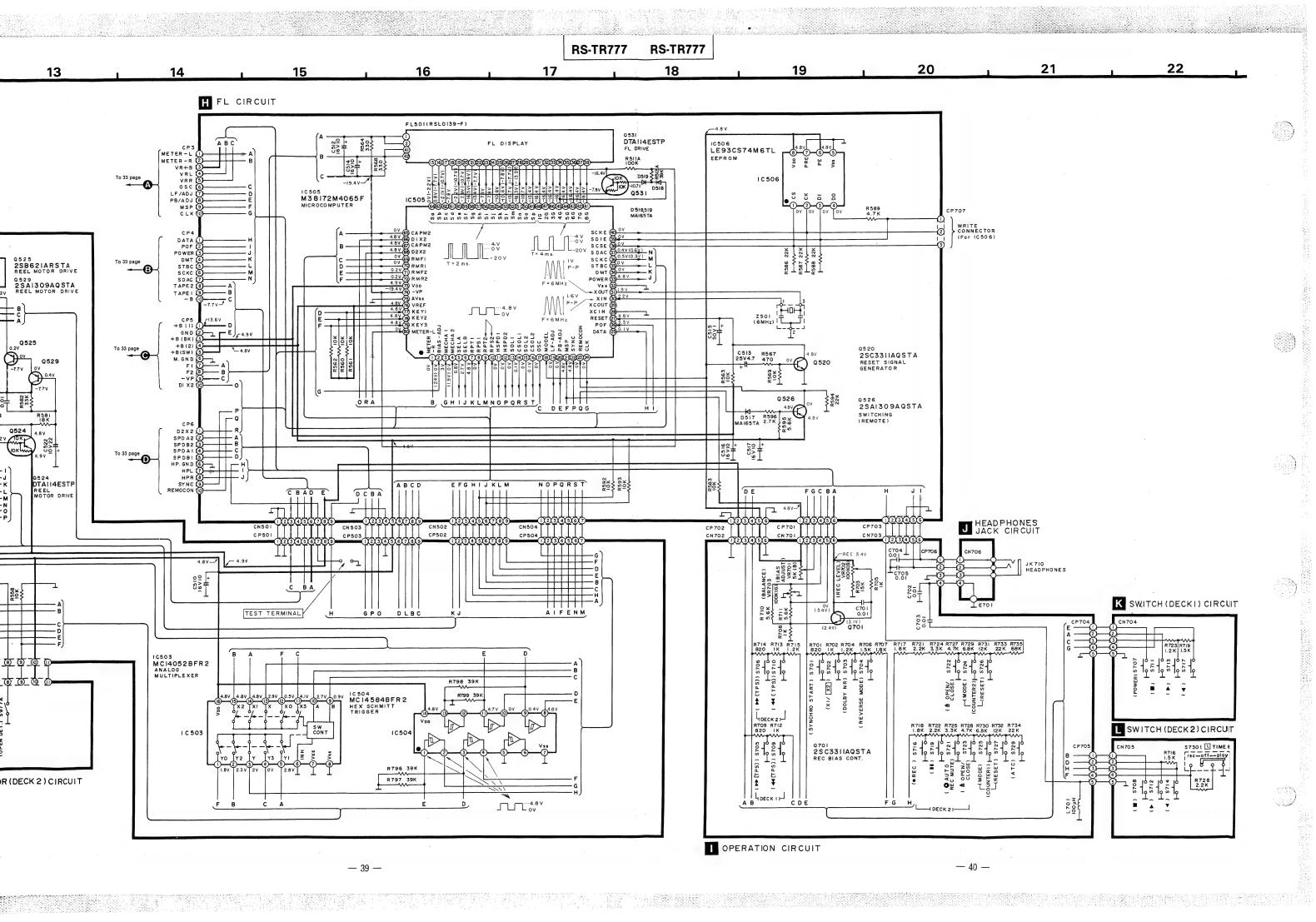
- Cover the parts boxes made of plastics with aluminum foli.
- Ground the soldering iron.
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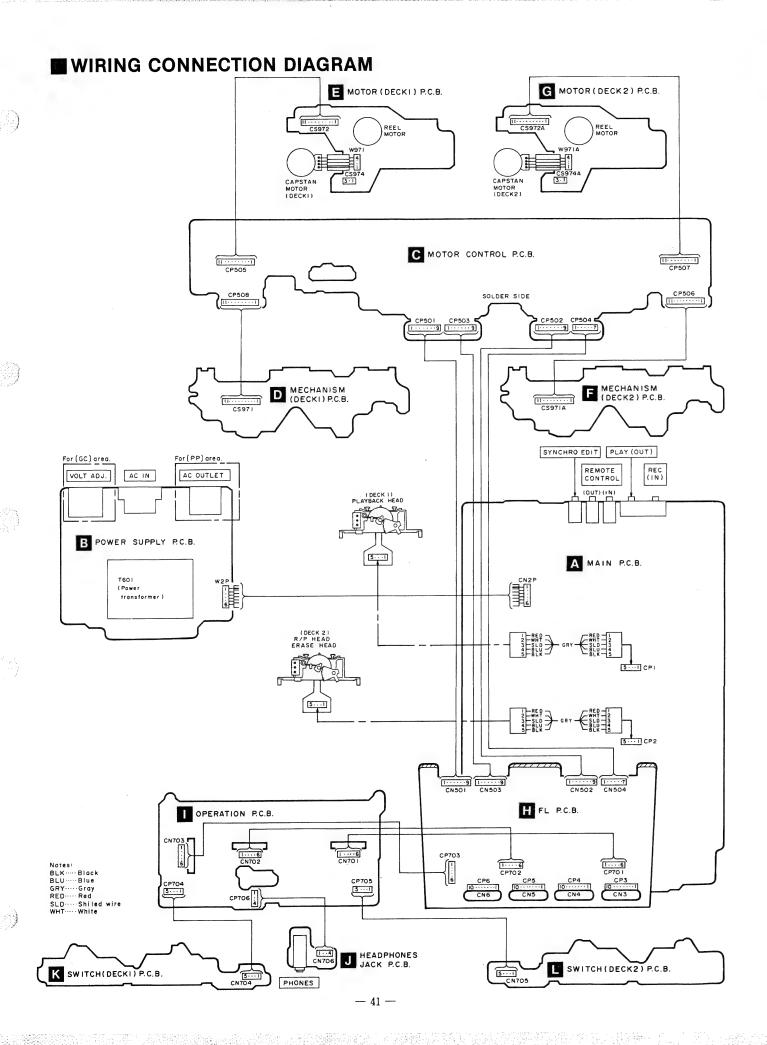






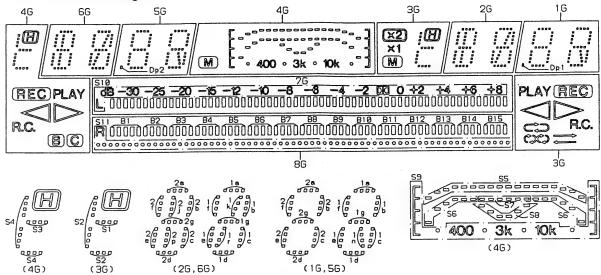






■INTERNAL CONNECTION OF FL

• Grid connection diagram



Anode connection table

	8G	7G	6G	5G	4G	3G	26	16
P1	Вı	B1	1 a	1 a			1 a	1a
P2	B2	B2	1 b	1 b			16	1 Ь
РЗ	B3	B3	1 c	1 c	R.C.	R.C.	1c	1c
P4	B4	B4	1 d	1 d	REC	REC	1 d	1 d
P5	B5	85	1 e	1 e	PLAY	PLAY	1 e	1e
P6	B6	B6	1 f	1 f	M	M	1 f	1 f
P7	B7	B7	1 g	1 g	8	×1	1 g	1 g
P8	B8	B8	2a	2a	C	×2	2a	2a
P9	B9	B9	2b	2b		H	2b	2b
P10	810	B10	2c	2c	S5	_	2c	2c
P11	B11	B11	2d	2d	S6	-	2d	2d
P12	B12	B12	2e	2e	S7	00	2e	2e
P13	B13	B13	2f	2f	S8		2f	2f
P14	B14	B14	2g	2g	S9	←	2g	2g
P15	B15	B15	2j,2p	Dp2	S3	S1	2j,2p	D p 1-
P16	S11	S10	1k,1r	1 n	S4	52	1k,1r	1 n

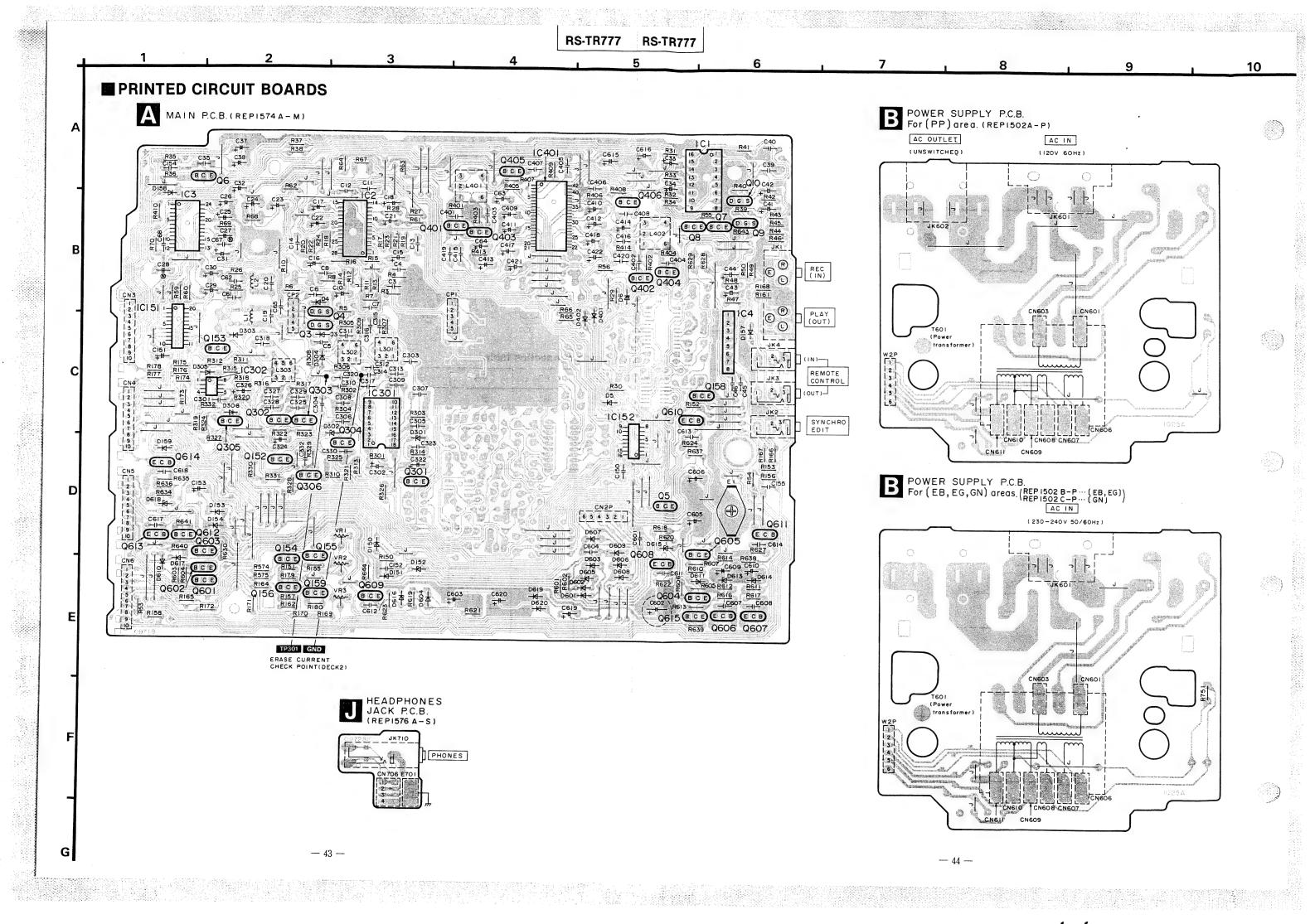
• Pin connection

PIN NO.	111111111111122222222233333333333333333
CONNECTION	FFNN876543211111111PPPPPPPPPNNNNNNNNNNNNNNNNNNNNN

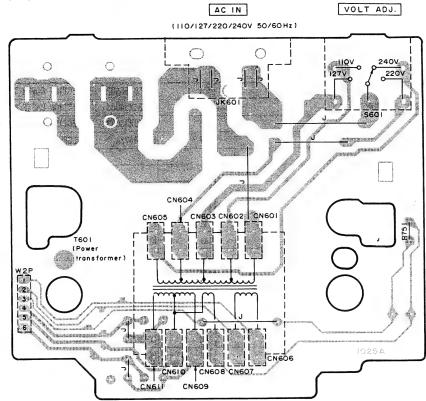
Note

1)	F1, F2	Filament
2)	NP	No pin

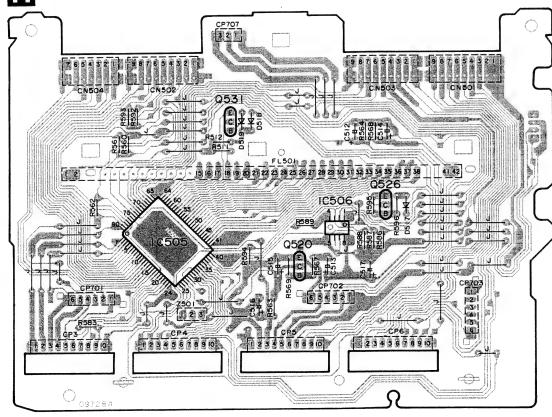
3)	NC	No connection
41	10 00	0.44



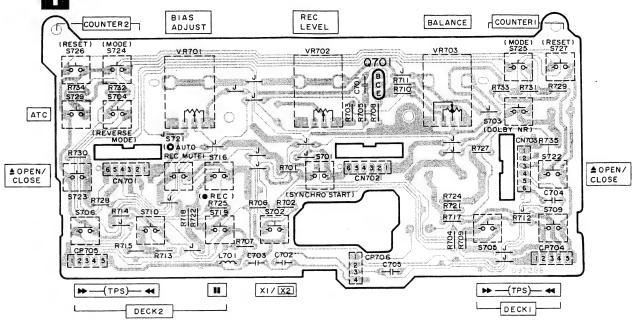




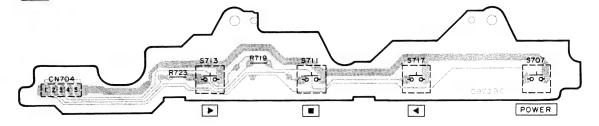
FL P.C.B. (REP1576 A-S)



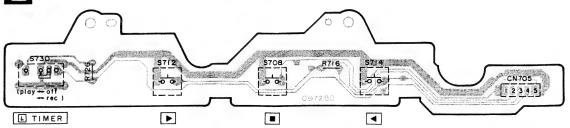
OPERATION P.C.B. (REP1576A-S)

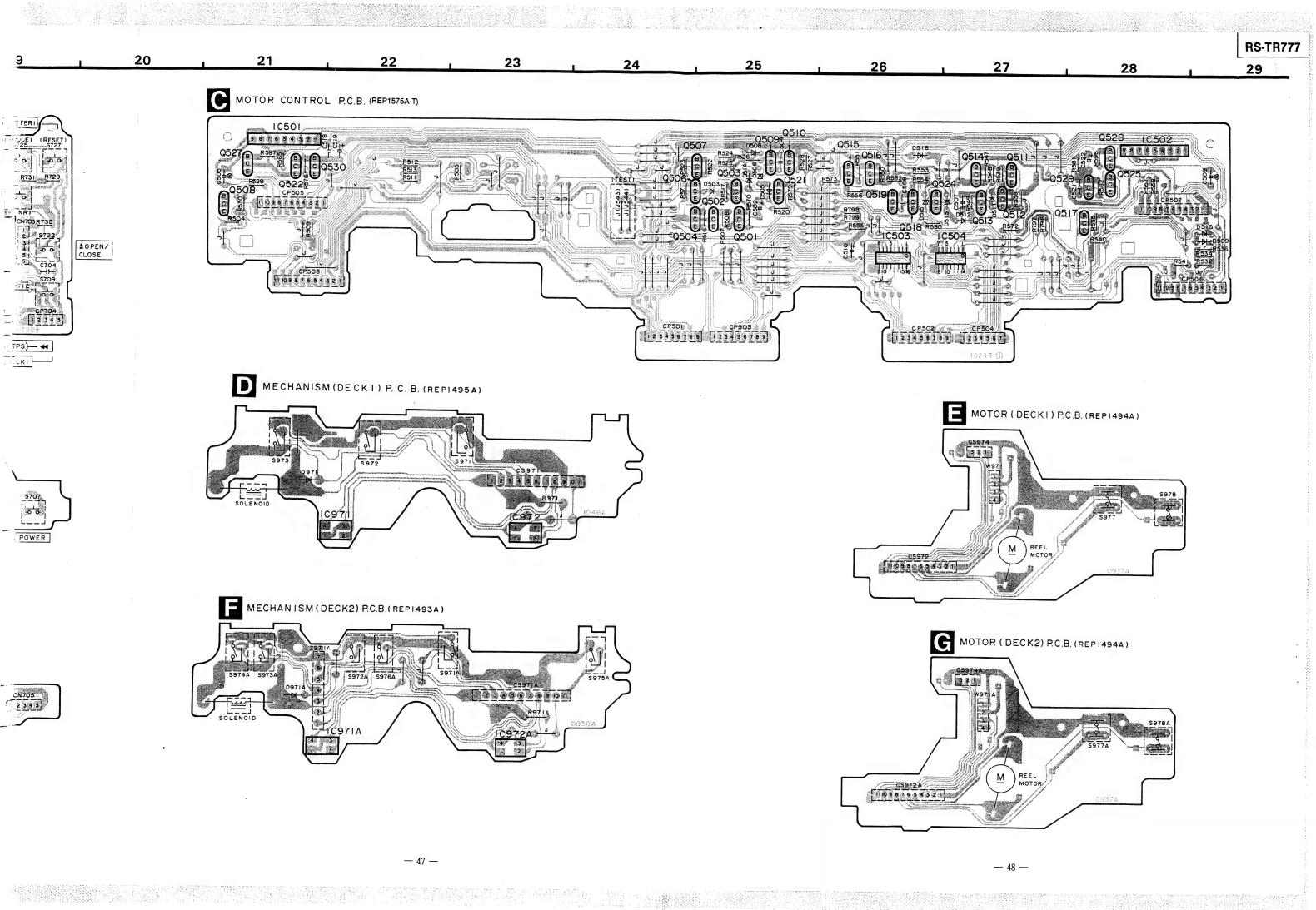


K SWITCH (DECKI) P.C.B. (REP1576A-S)



SWITCH (DECK 2) P.C.B. (REP1576A-S)





RS-TR777 RS-TR777 TERMINAL GUIDE OF IC'S, TRANSISTORS AND DIODES EXPLODED VIEWS BA4560FT1 M38172M4065F MC14584BFR2 14 Pin AN7353S-E2 24 Pin BU2040F-T2 16 Pin AN7352S-E2 28 Pin Cabinet parts MC14052BFR2 16 Pin AN7354SC-E2 42 Pin M62352FPE1 20 Pin BA6218 M5218AL RVSGP2S24BC 16 Pin 18 Pin 2SB621ARSTA AN7384N-A 2SD592AQRSTA UPC1297CA 2SA1309AQSTA 2SB1030AQSTA 2SC3311AQSTA 2SD1423QRSTA 2SB1357EFTA 2SD2037EFTA 2SC3327ABTP DTA114TSTP DTC114ESTP MA165TA MA167TA MA700TA MTZJ3R3ATA MTZJ5R1BTA MTZJ6R2BTA 2SJ164PQRTA 2SD1862QRTV6 Loading Cassette Mechanism Unit (DECK I) 1SR35200TB MTZJ7R5CTA RVD1SS133TA MTZJ8R2CTA MTZJ20DTA Loading Cas CP707 CN504 Mechanism **PACKAGING** ((EB, EG) areas.) A1, A2, A3, P5 P2 (CUSHION (D)) (CUSHION ©) CN703-A4(EG)area. (Others) (CUSHION ®) (CUSHION A)

⟨CUSHION ♠, ®, ©, ® Part No.: RPN0664-1 (PP, EG, GC), RPN0665 (EB)⟩

AI, A2, A3, P7

REPLACEMENT PARTS LIST

Notes: *Important safety notice:

Components identified by △ mark have special characteristics important for safety.

Furthermore, special parts which have purposes of fire-retardant (resistors), high-qua

Remarks

(EB, GN) (EB, EG)

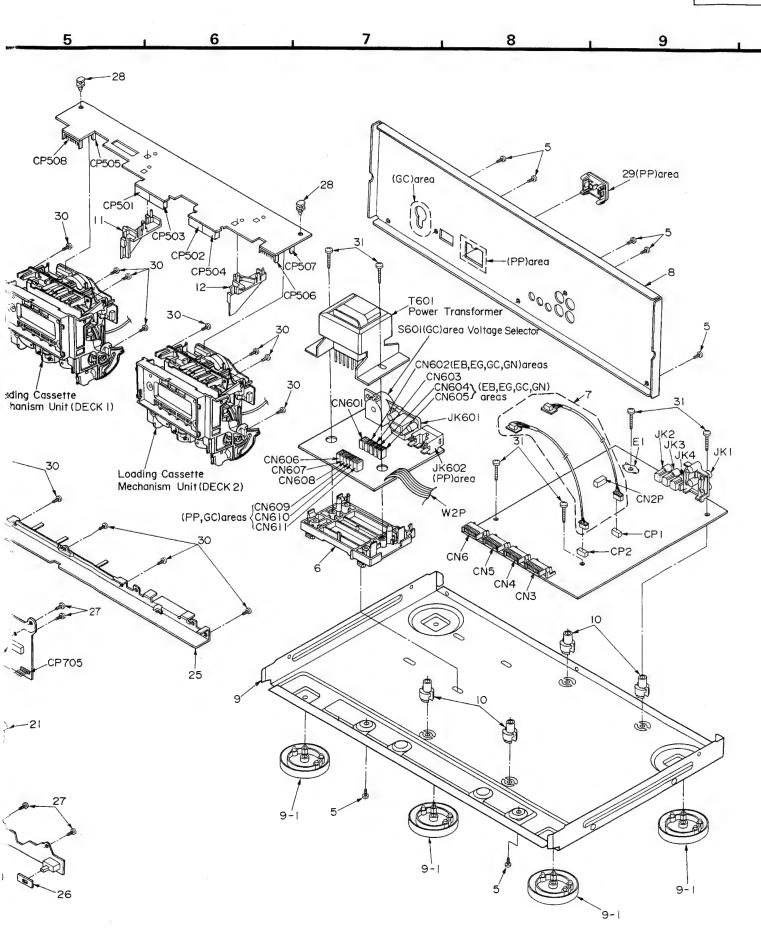
(PP) (EB, EG, GC, GN) (PP)

(EG, GC) A (PP) <u>∧</u>

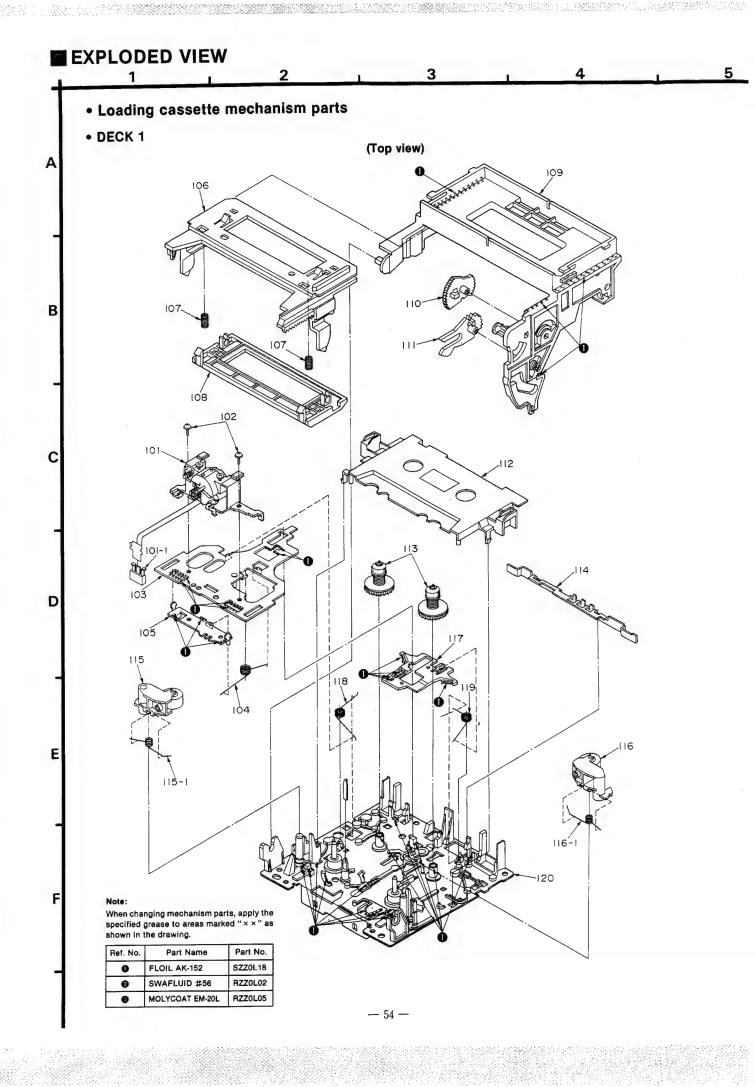
(GN) ⚠ (EB) A

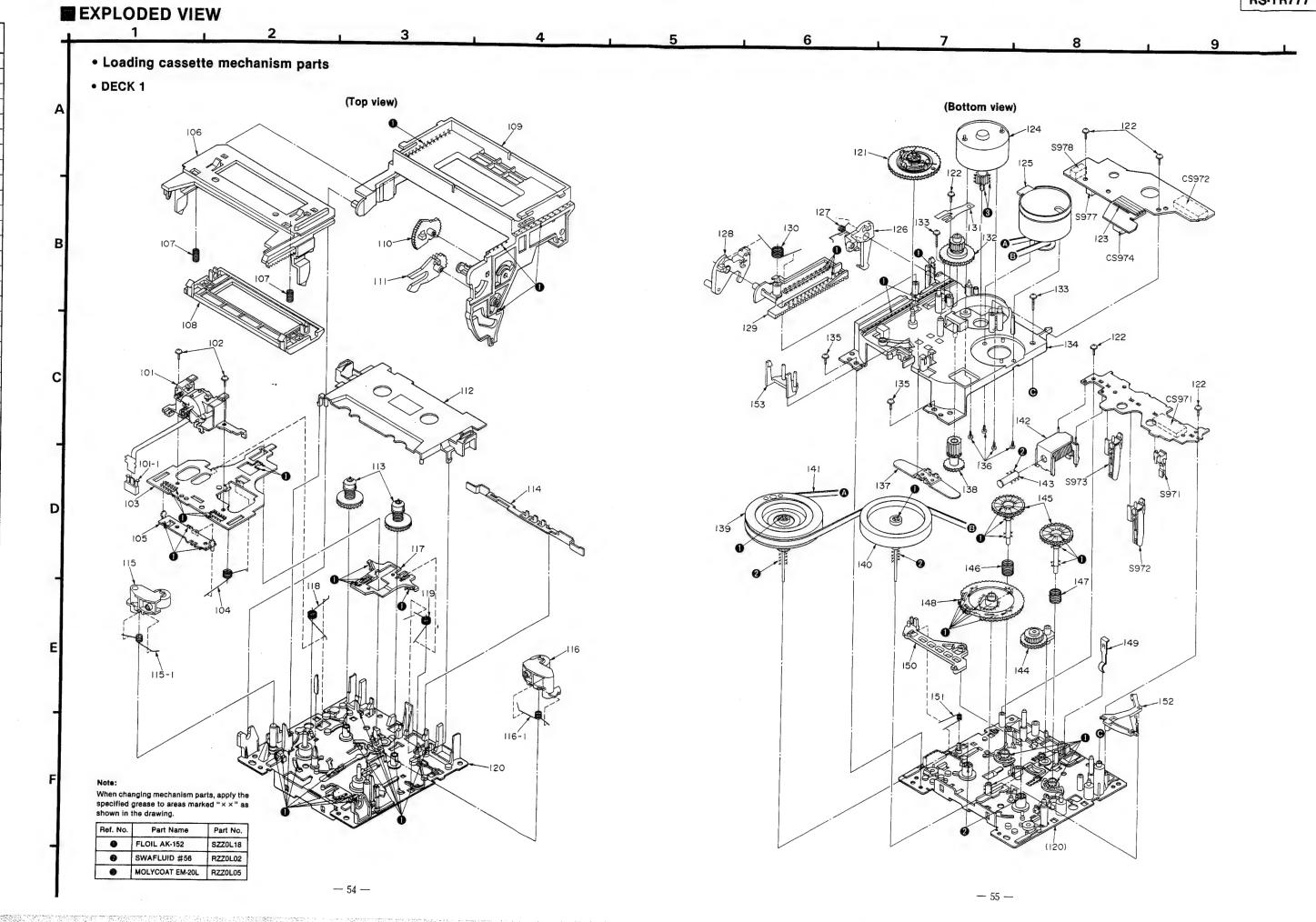
(GC) A

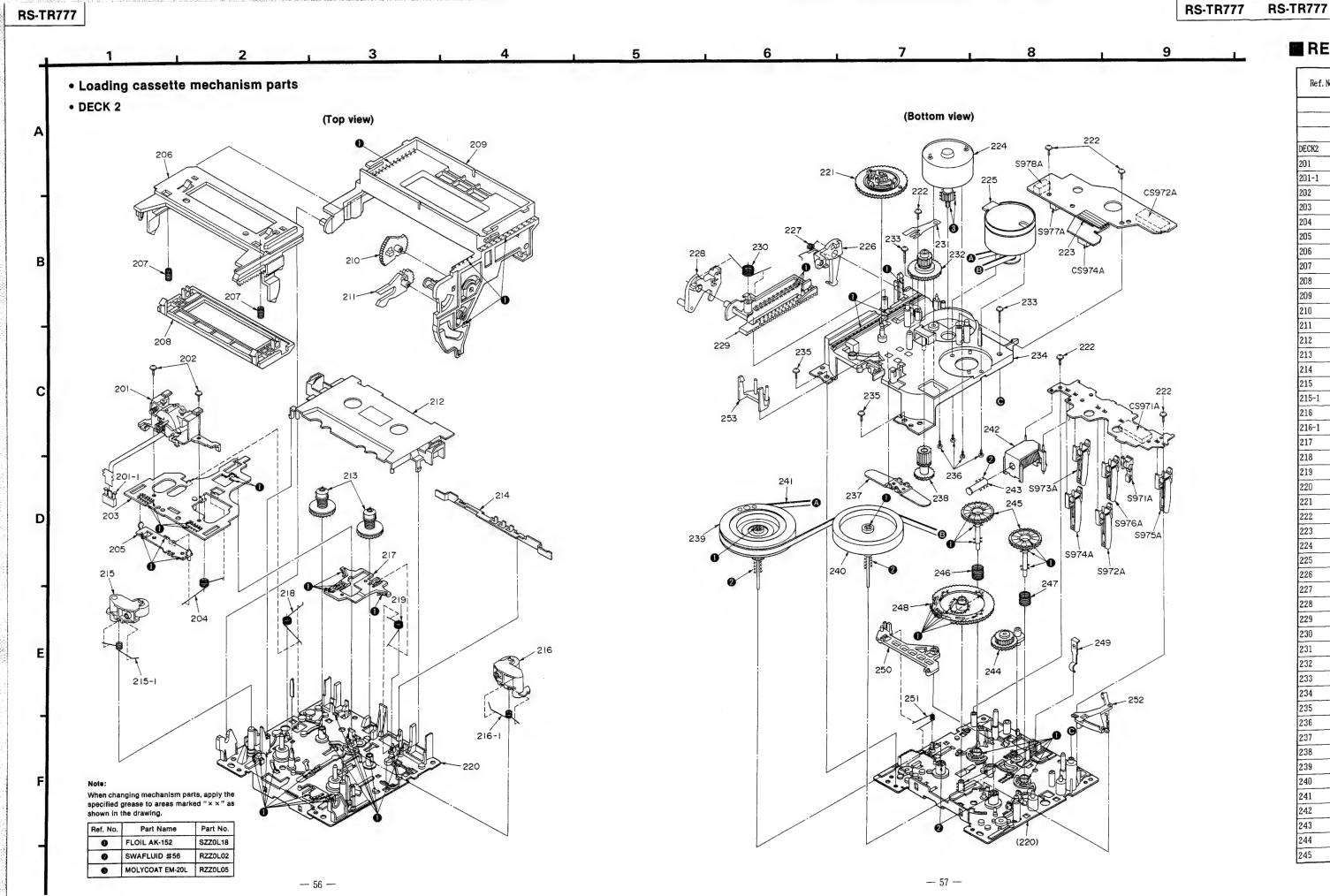
Part No.	Part Name & Description	Remarks	Ref. No.	Part No.	Part Name & Description	
			P4	XZB50X65A02Z	PROTECTION COVER(THIS UNIT)	
	CABINET AND CHASSIS		P5	XZB24X34C04	PROTECTION BAG (F. B., ACC.)	
			P6	XZB10X30C03	PROTECTION BAG (AC P. S. CORD)	(EB)
RHD30035-K	SCREW		P7	RQX9467ZA	ENVELOPE FOR CANADA	
RKM0016-K1	CABINET					
RYF0211B-K	CASSETTE LID (DECK1)				ACCESSORIES	<u> </u>
RYF0211C-K	CASSETTE LID (DECK2)					
XTBS3+8JFZ1	SCREW		A1	RFKSSTR979EG	INSTRUCTION MANUAL ASS'Y	(EG)
RMN0210	TRANSFORMER BASE		A1	RFKSSTR979GC	INSTRUCTION MANUAL ASS' Y	(GC)
REZ0574	CONNECTOR ASS' Y		A1	RFKSSTR979PP	INSTRUCTION MANUAL ASS' Y	(PP)
RGRO112G-B	REAR PANEL	(PP)	A1	RQT1751-B	INSTRUCTION MANUAL	(EB, GN
RGR0112H-C	REAR PANEL	(EG)	A2	RQA0013	WARRANTY CARD	(EB, EG
RGRO112H-D	REAR PANEL	(EB, GN)	A2	RQA0049	WARRANTY CARD FOR CANADA	
RGR0112I-B	REAR PANEL	(GC)	A2	RQX7433ZA	WARRANTY CARD	(GN)
RFKJLPG440AK	BOTTOM CHASSIS ASS'Y		A2	SQX7179	WARRANTY CARD	(PP)
RKA0053-A	FOOT		A3	RQCB0169	SERVICENTER LIST	(EB, EG
RKQ0089	P. C. B. HOLDER		A3	RQCB0391	SERVICENTER LIST	(PP)
RMN0208	P. C. B. FIXED PIECE (L)		A3	SQX9131	SERVICENTER LIST FOR CANADA	
RMN0209	P. C. B. FIXED PIECE (R)		A4	RJA0019-2K	AC POWER SUPPLY CORD	(EG, GC
RMN0195	FL HOLD PIECE		A4	SJA172	AC POWER SUPPLY CORD	(PP) <u>∧</u>
RMN0207	FL HOLDER		A4	SJA173	AC POWER SUPPLY CORD	(GN) <u>∧</u>
RFKGSTR777PP	FRONT PANEL ASS' Y		A4	VJA0733	AC POWER SUPPLY CORD	(EB) <u>∧</u>
RGK0534-N	BUTTON ORNAMENT		A5	SJP2249-3		,,-
RGU0843-K	BUTTON, OPERATION (DECK1)		A6			
RGU0844-K	BUTTON, OPERATION (DECK2)		A7	SJP5213-2	POWER PLUG ADAPTOR	(GC) A
RFKNSTR777AK	BUTTON ASS' Y, OPERATION		A8	RQLA0134	CAUTION LABEL (VOL. SELECTOR)	
RFKNSTR777BK	BUTTON ASS' Y, COUNTER1					
RFKNSTR979CK	BUTTON ASS' Y, COUNTER2					
RGW0043	KNOB, BALANCE/BIAS ADJ.					
RGW0164-K	KNOB, REC LEVEL					
RKW0253-K	TRANSPARENT PLATE					
RMA0682	MECHANISM ANGLE					
RMZ0218	SPACER					
XTBS26+10J	SCREW					
SHR9806	MINI CARD SPACER					-
SJS9331A	AC OUTLET COVER	(PP)				
XTB3+10JFZ	SCREW					
XTB3+20JFZ	SCREW					
	PACKING MATERIAL		_			
DDC1 405	DAGINING GAOD	()				
			_			
			_			
			_			
	ACCESSORIES PAD	(EB)				
	RKM0016-K1 RYF0211B-K RYF0211C-K RYF0211C-K XTBS3+8JF21 RMN0210 REZ0574 RGR0112G-B RGR0112H-C RGR0112H-D RGR0112I-B RFKJLPG440AK RKA0053-A RKQ0089 RMN0209 RMN0209 RMN0207 RFKGSTR777PP RGK0534-N RGU0843-K RGU0844-K RFKNSTR777BK RFKNSTR777BK RFKNSTR777BK RFKNSTR777BK RFKNSTR777BK RFKNSTR777BK RFKNSTR777BK RSW0043 RGW0164-K RKW0253-K RMA0682 RM20218 XTBS26+10J SHR9806 SJS9331A XTB3+10JFZ XTB3+20JFZ RPG1425 RPG1426 RPG1544 RPN0664-1 RPN0665	RHD30035-K SCREW RKM0016-K1 CABINET RYF0211B-K CASSETTE LID (DECK1) RYF0211C-K CASSETTE LID (DECK2) XTBS3+8JFZ1 SCREW RMN0210 TRANSFORMER BASE REZ0574 CONNECTOR ASS' Y RGR0112G-B REAR PANEL RGR0112H-D REAR PANEL RGR0112H-D REAR PANEL RFKJLPG440AK BOTTOM CHASSIS ASS' Y RKA0053-A FOOT RKQ0089 P. C. B. HOLDER PMN0208 P. C. B. FIXED PIECE (L) RMN0209 P. C. B. FIXED PIECE (R) RMN0195 FL HOLD PIECE RMN0207 FL HOLDER RFKGSTR777PP FRONT PANEL ASS' Y RGK0534-N BUTTON ORNAMENT RGU0843-K BUTTON, OPERATION (DECK1) RGV0844-K BUTTON, OPERATION (DECK2) RFKNSTR777BK BUTTON ASS' Y, COUNTER1 RFKNSTR777BK BUTTON ASS' Y, COUNTER1 RFKNSTR979CK BUTTON ASS' Y, COUNTER2 RGW0043 KNOB, BALANCE/BIAS ADJ. RGW0164-K KNOB, REC LEVEL RKW0253-K TRANSPARENT PLATE RMA0682 MECHANISM ANGLE RMZ0218 SPACER XTBS3+20JFZ SCREW XTB3+10JFZ SCREW XTB3+20JFZ SCREW XRPN0665 CUSHION	RHD30035-K SCREW RKM0016-K1 CABIRET RYF0211B-K CASSETTE LID (DECK1) RYF0211C-K CASSETTE LID (DECK2) XTBS3+8JFZ1 SCREW RM00210 TRANSFORMER BASE REZ0574 CONNECTOR ASS' Y RGR0112G-B REAR PANEL (EG) RGR0112H-C REAR PANEL (EG) RGR0112H-D REAR PANEL (EG) RFKJLP6440AK BOTTOM CHASSIS ASS' Y RKA0053-A FOOT RKQ0089 P. C. B. FIXED PIECE (L) RMN0208 P. C. B. FIXED PIECE (R) RMN0209 P. C. B. FIXED PIECE (R) RMN0207 FL HOLDER RKGSTR777PP FRONT PANEL ASS' Y RGK0534-N BUTTON ORNAMENT RGU0843-K BUTTON ORNAMENT RGU0843-K BUTTON OPERATION (DECK1) RGW044-K BUTTON OPERATION (DECK2) RFKNSTR777BK BUTTON ASS' Y, COUNTER1 RFKNSTR777BK BUTTON ASS' Y, COUNTER1 RFKNSTR77BK ROWO43 RKW0253-K TRANSPARENT PLATE RMA0682 MECHANISM ANGLE RMS2018 SPACER XTBS26+10J SCREW XTB3+20JFZ SCREW XTB3+20JFZ SCREW XTB3+20JFZ SCREW XTB3+20JFZ SCREW XTB3+20JFZ SCREW XTB3+20JFZ SCREW XPRO664-1 CUSHION (PP, EG, GC, GN) RPN06655 CUSHION (EB)	CABINET AND CHASSIS	CABINET AND CHASSIS	P5 XZB2K34C04 PROTECTION BAG (F. R. AGC.)



Ref. No.	Part No.	Part Name & Description	Remarks	Ref. No.	Part No.	Part Name & Description	Remarks
				146	RMB0263	SPRING(F)	
		LOADING CASSETTE MECH PARTS		147	RMB0264	SPRING (R)	
				148	RDK0019	MAIN GEAR	
ECK1				149	RUS609ZC	SPRING, TAPE PRESSURE	
01	RXQ0269	HEAD BLOCK (PLAYBACK)		150	RML0267	TRIGGER LEVER	
01-1	RMQ0360	CONNECTOR HOLDER		151	RUW147ZA	SPRING, TRIGGER LEVER	
02	XTW2+5L	SCREW		152	RML0268	FOR. /REV. SIDE LEVER	
03		HEAD BASE ASS' Y		153	RMQ0368	HOLDER	
04	RMB0266	SPRING, FOR. /REV. SIDE ROD					
05		FOR /REV. SIDE ROD		- 	-		
06		LIFTER					
07	RMB0272	SPRING, STABILIZER		-			
08	RMQ0319	STABILIZER		-			
09	RKF0284-K	CASSETTE HOLDER		-			
		LIFT ARM		-			
10	RML0275	LIFT GEAR					
11	RDG0212	DRESSING PLATE ASS' Y					
12							
13	RXR0015	REEL TABLE					
14	RML0272	SWITCH LEVER					
.15	RXP0048	PINCH ARM (R)		-			
15-1	RMB0260	SPRING, PINCH ARM(R)			ļ		
.16	RXP0047	PINCH ARM (F)					
16-1	RMB0259	SPRING, PINCH ARM (F)		<u> </u>			
.17	RMM0091	BRAKE ROD					
.18	RMB0261	SPRING, HEAD BASE					
19	RMB0262	SPRING, BRAKE ROD					
.20		CHASSIS ASS' Y			-		
21	RXG0030	FRICTION GEAR					
22	XTW2+6S	SCREW					
.23	RWJ4704050XX	MOTOR WIRE(4P), W971					
24	REMO037	REEL MOTOR					
.25	REMO036	CAPSTAN MOTOR					
26	RML0271	HOLDER HOOK					
27	RMB0268	SPRING, HOLDER HOOK					
28	RML0270	DRIVE LEVER					
29	RMQ0312	DRIVE RACK					
30	RMB0269	SPRING, DRIVE LEVER					
.31	RMC0169	SHIELD PLATE					
32	RDG0209	INTERMEDIATE GEAR					
.33	XTW26+12S	SCREW					
34	RFKRSTR979CK	SUB CHASSIS					
35	XTW26+6L	SCREW					
36	RHD26013	SCREW		1			
37	RMQ0314	SURASUTO SPACER		1			
38	RDG0206	LOADING GEAR		1			
39	RXF0040	FLYWHEEL (F)		1			
40		FLYWHEEL (R)		-	 		
	RXF0041				-		
41	RDV108ZA	BELT					
42	RSJ0003	SOLENOID		-			
43	RMS0398	MOVING IRON CORE			 		
44	RXL0089 RXG0029	IDLE GEAR REEL GEAR			<u> </u>		

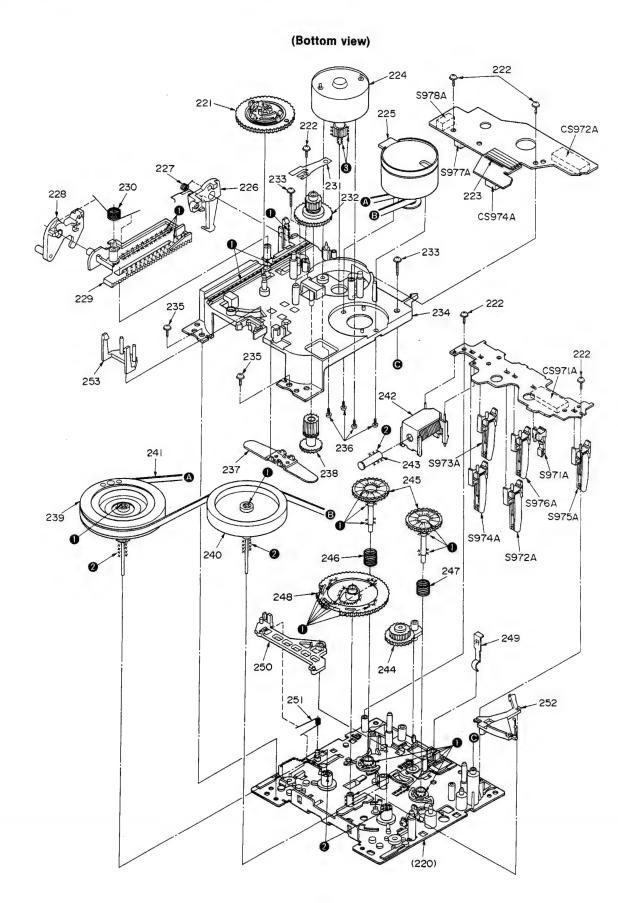






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REPLACEMENT PARTS LIST

Ref. No.	Part No.	Part Name & Description	Remarks	Ref. No.	Part No.	Part Name & Description	Remarks
				246	RMB0263	SPRING(F)	
		LOADING CASSETTE MECH. PARTS		247	RMB0264	SPRING(R)	
				248	RDK0019	MAIN GEAR	
DECK2				249	RUS609ZC	SPRING, TAPE PRESSURE	
201	RXQ0264	HEAD BLOCK (REC. /PLAYBACK)		250	RML0267	TRIGGER LEVER	
201-1	RMQ0360	CONNECTOR HOLDER		251	RUW147ZA	SPRING, TRIGGER LEVER	
202	XTW2+5L	SCREW		252	RML0268	FOR. /REV. SIDE LEVER	
203	RFKRSTR979BK	HEAD BASE ASS' Y		253	RMQ0368	HOLDER	
204	RMB0266	SPRING, FOR /REV. SIDE ROD					
205	RXM0036	FOR /REV. SIDE ROD					
206	RGQ0092-K	LIFTER					
207	RMB0272	SPRING, STABILIZER					
208	RMQ0319	STABILIZER					
209	RKF0284-K	CASSETTE HOLDER			-		
210	RML0275	LIFT ARM			-	-	*
211	RDG0212	LIFT GEAR			1		
212	 	DRESSING PLATE ASS' Y					
213	RXR0015	REEL TABLE					
214	RML0272	SWITCH LEVER	+	-			
215	RXP0048	PINCH ARM(R)			-		
215-1	RMB0260	SPRING, PINCH ARM (R)	****				
216	RXP0047	PINCH ARM (F)					
216-1	RMB0259	SPRING, PINCH ARM (F)					
217	RMM0091	BRAKE ROD			-		
218	RMB0261	SPRING, HEAD BASE					
219	RMB0262	SPRING, BRAKE ROD			-		
					1		:
220							
221	RXG0030	FRICTION GEAR		_			
222	XTW2+6S	SCREW					
223	+	MOTOR WIRE (4P), W971A			 		
224	REMO037	REEL MOTOR		_			
225	REMOO36	CAPSTAN MOTOR		_			
226	RML0271	HOLDER HOOK					
227	RMB0268	SPRING, HOLDER HOOK			ļ		
228	RML0270	DRIVE LEVER					
229	RMQ0312	DRIVE RACK					······
230	RMB0269	SPRING, DRIVE LEVER					
231	RMC0169	SHIELD PLATE					
:32	RDG0209	INTERMEDIATE GEAR					
33	XTW26+12S	SCREW					
34		SUB CHASSIS ASS'Y					
35	XTW26+6L	SCREW					
36	RHD26013	SCREW					
37	RMQ0314	SURASUTO SPACER					
38	RDG0206	LOADING GEAR					
39	RXF0040	FLYWHEEL (F)					
40	RXF0041	FLYWHEEL (R)					
41	RDV108ZA	BELT					
42	RSJ0003	SOLENOID					
43		MOVING IRON CORE					
44	RXL0089	IDLE GEAR			 		
45		REEL GEAR			-		

Notes: *Important safety notice:

Components identified by △ mark have special characteristics important for safety.

Furthermore, special parts which have purposes of fire-retardant (resistors), high-quality sound (capacitors), low-noise (resistors), etc. are used. When replacing any of components, be sure to use only manufacturer's specified parts shown in the parts list.

*The parenthesized Indications in the Remarks columns specify the areas. (Refer to the cover page for area.)

Parts without these indications can be used for all areas.

	Part No.	Part Name & Description	Remarks	Ref. No.	Part No.	Part Name & Description	Remarks
				Q509	2SD1862QRTV6	TRANSISTOR	
		INTEGRATED CIRCUIT (S)		Q510	2SC3311A-Q	TRANSISTOR	
				Q511	DTC114ESTP	TRANSISTOR	
IC1	AN7384	ELECTRIC VOLUME		Q512	2SB1030AQSTA	TRANSISTOR	
IC2	AN7352S-E2	PLAYBACK AMP		Q513	DTC114ESTP	TRANSISTOR	
IC3	AN7353S-E2	REC. EQ. AMP (DECK2)		Q514	2SB1030AQSTA	TRANSISTOR	
IC4	M5218L	HEADPHONES AMP		Q515	DTC114ESTP	TRANSISTOR	
IC151	M62352FPE1	12ch D/A CONVERTER		Q516	2SB621A-R	TRANSISTOR	
IC152	BU2040F-T2	SERIAL PARALLEL CONVERTER		Q517	2SC3311A-Q	TRANSISTOR	
IC301	UPC1297CA	DOLBY HX PRO(DECK2)		Q518	2SD1862QRTV6	TRANSISTOR	
IC302	SVIBA4560FT1	E. CURRENT ADJ. CONT. (DECK2)		Q519, 520	2SC3311A-Q	TRANSISTOR	
IC401	AN7354SC-E2	DOLBY B/C NR		Q521	DTA114ESTP	TRANSISTOR	
IC501	BA6218	REEL MOTOR DRIVE (DECK1)	VV.48 (0.00 - 1.1)	Q522	2SB621A-R	TRANSISTOR	
IC502	BA6218	REEL MOTOR DRIVE (DECK2)		Q524	DTA114ESTP	TRANSISTOR	
IC503	MC14052BFR2	ANALOG MULTIPLEXER		Q525	2SB621A-R	TRANSISTOR	
IC504	MC14584BFR2	HEX SCHMITT TRIGGER		Q526	2SA1309A-R	TRANSISTOR	
IC505	M38172M4065F	MICROCOMPUTER		Q527, 528	2SD1423QRS	TRANSISTOR	
IC506	LE93CS47M6TL	EEPROM		Q529, 530	2SA1309A-R	TRANSISTOR	
IC971	RVSGP2S24BC	PHOTO INTERRUPTER (DECK1)		Q531	DTA114ESTP	TRANSISTOR	
IC971A	RVSGP2S24BC	PHOTO INTERRUPTER (DECK2)		Q601, 602	2SC3327-A	TRANSISTOR	
IC972	RVSGP2S24BC	PHOTO INTERRUPTER (DECK1)		Q603	DTC114ESTP	TRANSISTOR	
IC972A	RVSGP2S24BC	PHOTO INTERRUPTER (DECK2)		Q604	2SA1309A-R	TRANSISTOR	
				Q605	2SC3311A-Q	TRANSISTOR	
		TRANSISTOR(S)		Q606	2SD2037EFTA	TRANSISTOR	Δ
				Q607	2SB1357EFTA	TRANSISTOR	Δ
Q3, 4	2SJ164PQRTA	TRANSISTOR		Q608	2SD2037EFTA	TRANSISTOR	Δ
Q5	DTA114ESTP	TRANSISTOR		Q609	2SB621A-R	TRANSISTOR	Δ
Q6-8	2SC3311A-Q	TRANSISTOR		Q610	2SD2037EFTA	TRANSISTOR	
Q9, 10	2SJ164PQRTA	TRANSISTOR		Q611	2SB1357EFTA	TRANSISTOR	
	DTA114ESTP	TRANSISTOR		Q612	2SB621A-R	TRANSISTOR	
Q154, 155	DTC114ESTP	TRANSISTOR		Q613	2SD2037EFTA	TRANSISTOR	
Q156	2SA1309A-R	TRANSISTOR		Q614	2SB1357EFTA	TRANSISTOR	Δ
Q158	DTC114ESTP	TRANSISTOR		Q615	2SA1309A-R	TRANSISTOR	
Q159	2SA1309A-R	TRANSISTOR		0701	2SC3311A-Q	TRANSISTOR	
Q301	2SA1309A-R	TRANSISTOR		1			
Q302, 303	2SC3311A-Q	TRANSISTOR				DIODE (S)	
2304	2SB621A-R	TRANSISTOR					
Q305	2SD592ANCQ	TRANSISTOR	4	D3, 4	MA167	DIODE	
2306	2SB1030AQSTA	TRANSISTOR		D5	MA165	DIODE	
2401-406	2SC3311A-Q	TRANSISTOR		D6	MTZJ6R2BTA	DIODE	
	DTC114ESTP	TRANSISTOR		D150, 151	MA165	DIODE	
2502	2SB1030AQSTA	TRANSISTOR		D152	MTZJ5R1BTA	DIODE	
	DTC114ESTP	TRANSISTOR		D153, 154	1SR35200TB	DIODE	
2504	2SB1030AQSTA	TRANSISTOR		D153, 154 D157-159	MA165	DIODE	
2504	DTC114ESTP	TRANSISTOR		D301, 302	MTZJ7R5CTA	DIODE	
2500 2507	2SB621A-R	TRANSISTOR		D301, 302 D303-306	MA165	DIODE	
2508	2SC3311A-Q	TRANSISTOR		D401, 402		DIODE	

	Part No.	Part Name & Description	Remarks	Ref. No.	Part No.	Part Name & Description	Remarks
D503	MA700	DIODE					
D505	MA165	DIODE		FL501	RSL0139-F	FL DISPLAY TUBE	
D506	MTZJ3R3ATA	DIODE		,			
D508	MTZJ7R5CTA	DIODE				SWITCH(ES)	
D509, 510	MA165	DIODE					
D511	MA700	DIODE		S601	SSR187-1	VOLTAGE SELECTOR	(GC) ⚠
D512	MA165	DIODE		S701	EVQ21405R	SYNCHRO START	
D513	MTZJ3R3ATA	DIODE		S702	EVQ21405R	SPEED (X1, X2)	
D514	1SR35200TB	DIODE		S703	EVQ21405R	DOLBY NR(B, C)	
D515	MTZJ7R5CTA	DIODE		S704	EVQ21405R	REVERSE MODE	
D516	1SR35200TB	DIODE		S705	EVQ21405R	F. F. <tps>(DECK1)</tps>	
D517-519	MA165	DIODE		S706	EVQ21405R	F. F. <tps>(DECK2)</tps>	
D601, 602	MA165	DIODE	Δ	S707	EVQ21405R	POWER	
D603-609	1SR35200TB	DIODE	Δ	S708	EVQ21405R	STOP (DECK2)	
D610, 611	MA165	DIODE		S709	EVQ21405R	REW. <tps>(DECK1)</tps>	
D613, 614	MTZJ8R2CTA	DIODE	Δ	S710	EVQ21405R	REW. <tps>(DECK2)</tps>	
D615, 011	MTZJ6R2BTA	DIODE	Δ	S711	EVQ21405R	STOP (DECK1)	
D616	MTZJ20DTA	DIODE	Δ	S712	EVQ21405R	F. PLAYBACK (DECK2)	
D617	MA165	DIODE		S713	EVQ21405R	F. PLAYBACK (DECK1)	
D618	MTZJ8R2CTA	DIODE	Δ	S714	EVQ21405R	R. PLAYBACK (DECK2)	
D619, 620	1SR35200TB	DIODE	Δ	S716	EVQ21405R	REC (DECK2)	
D971	RVD1SS133TA	DIODE (DECK1)	<u> </u>	S717	EVQ21405R	R. PLAYBACK (DECK1)	
D971A	-			S719	EVQ21405R	PAUSE (DECK2)	<u> </u>
ALVED	RVD1SS133TA	DIODE (DECK2)		S721		AUTO REC MUTE (DECK2)	
	-	WADIANIE DECIGEODICA			EVQ21405R		
		VARIABLE RESISTOR(S)		S722	EVQ21405R	OPEN/CLOSE (DECK1)	ļ
LTD1 0	TIMBUL LOOPEO	MADE ODEED AND		S723	EVQ21405R	OPEN/CLOSE (DECK2)	
VR1-3	EVNDXAA00B53	TAPE SPEED ADJ.		S724	EVQ21405R	COUNTER2 MODE (DECK2)	
VR701	EVJ02KF02B53	BIAS ADJ. CONTROL		S725	EVQ21405R	COUNTER1 MODE (DECK1)	
VR702	EVJ02FF02B15	REC LEVEL CONTROL		S726	EVQ21405R	COUNTER2 RESET (DECK2)	
VR703	EVJ02SF02G15	BALANCE CONTROL		S727	EVQ21405R	COUNTER1 RESET (DECK1)	
				S729	EVQ21405R	ATC (DECK2)	
		OSC. (S) AND COMBINATION(S)		S730	SSS180-1	TIMER	
				S971	RSH1A018-U	MODE (DECK1)	
Z 501		CRYSTAL OSCILLATOR (6MHz)		S971A	RSH1A018-U	MODE (DECK2)	
Z971A	EXBF6L306SYV	COMBINATION PART (DECK2)		S972	RSH1A019-U	HALF (DECK1)	
				S972A	RSH1A019-U	HALF (DECK2)	
		COIL (S)		S973	RSH1A019-U	ATS (DECK1)	
				S973A	RSH1A019-U	ATS (DECK2)	
L1	RLZ0003	COIL		S974A	RSH1A019-U	R. REC INH. (DECK2)	
L2	SLQX303-1KT	COIL		S975A	RSH1A019-U	F. REC INH. (DECK2)	
L301, 302	SL09B1-Z	COIL		S976A	RSH1A019-U	ATS (DECK2)	
L303	SL09B4-K	COIL		S977	RSH1A022-U	OPEN DETECTION (DECK1)	
L401, 402	QLM9Z10K	COIL		S977A	RSH1A022-U	OPEN DETECTION (DECK2)	
L701	ELEXT101KA9	COIL		S978	RSH1A022-U	CLOSE DETECTION(DECK1)	
				S978A	RSH1A022-U	CLOSE DETECTION (DECK2)	
		TRANSFORMER (S)					
	 					CONNECTOR (S) AND SOCKET (S)	
T601	RTP1U4C001-V	POWER TRANSFORMER	(PP) <u>∧</u>				
Г601		POWER TRANSFORMER	(EB, EG, GN) △	CN2P	RJS1A6606	CONNECTOR (6P)	
r601		POWER TRANSFORMER	(GC) △	CN3-6	RJU003K010M1	SOCKET (10P)	
	WILL TO TEOUR A	TOWNER THERMOLOGUELL	100/12	CN501-503	RJU057W009	SOCKET (9P)	1
	1			011001 000	1.0000711003	COURT (OI)	

Ref. No.	Part No.	Part Name & Description	Remarks	Ref. No.	Part No.	Part Name & Description	Remarks
CN601	RJS1A1101T1	CONNECTOR (1P)		CS974	RJP3G17ZA	CONNECTOR (3P) (DECK1)	
CN602	RJS1A1101T1	CONNECTOR (1P)	(EB, EG, GC, GN)	CS974A	RJP3G17ZA	CONNECTOR (3P) (DECK2)	
CN603	RJS1A1101T1	CONNECTOR (1P)					
CN604, 605	RJS1A1101T1	CONNECTOR (1P)	(EB, EG, GC, GN)			JACK(S)	
CN606-608	RJS1A1101T1	CONNECTOR (1P)					
CN609-611	RJS1A1101T1	CONNECTOR (1P)	(PP, GC)	JK1	SJF3069N	TERMINAL BOARD: REC/PLAY	
CN701-703	RJU066H06	SOCKET (6P)		JK2	RJJ33T01	M3 JACK (BLACK) : S. EDIT	
CN704, 705	SJS50581BB	SOCKET (5P)		JK3, 4	RJJ33TR01	M3 JACK (RED) : R. C.	
CN706	RJU057W004	SOCKET (4P)		JK601	SJSD16	AC INLET	(PP, GN) ⚠
CP1, 2	RJP5G18ZA	CONNECTOR (5P)		JK601	SJS9236	AC INLET	(EB, EG, GC) ⚠
CP3-6	RJT003K010-1	CONNECTOR (10P)		JK602	SJS9331B	AC OUTLET	(PP) <u>∧</u>
CP501-503	RJT057W009-1	CONNECTOR (9P)		JK710	SJJD19	HEADPHONES JACK	
CP504	RJT057W007-1	CONNECTOR (7P)					
CP505-508	RJT028W011-2	CONNECTOR (11P)				GND PART(S)	
CP701-703	RJT066H06	CONNECTOR (6P)					
CP704, 705	RJT067H05	CONNECTOR (5P)		E1	SNE1004-1	GND PLATE	
CP706	RJT057W004-1	CONNECTOR (4P)		E701	RMC0199	GND PLATE	
CP707	RJP3G17ZA	CONNECTOR (3P)					
CS971	RJU028W011-1	SOCKET (11P) (DECK1)				FLAT CABLE (S)	
CS971A	RJU028W011-1	SOCKET (11P) (DECK2)					
CS972	RJU028W011-1	SOCKET (11P) (DECK1)		W2P	REZ0573	FLAT CABLE (6P)	
CS972A	RJU028W011-1	SOCKET (11P) (DECK2)					

RESISTORS AND CAPACITORS

Notes: * Capacity values are in microfarads (uF) unless specified otherwise, P=Pico-farads (pF) F=Farads (F) * Resistance values are in ohms, unless specified otherwise, 1 K=1,000 (OHM), 1 M=1,000 k (OHM)

Ref. No.	Part No.	Values & Remarks	Ref. No.	Part No.	Va	lues & Remarks	Ref. No.	Part No.	Va	lues &	Remarks
			R53, 54	ERDS2TJ101	1/4W	100	R173	ERDS2TJ221	1/4W	220	
		RESISTORS	R55	ERDS2TJ223	1/4W	22K	R174-178	ERDS2TJ103	1/4W	10K	
			R56	ERDS2TJ332	1/4W	3. 3K	R179, 180	ERDS2TJ184T	1/4W	180K	
R3, 4	ERDS2TJ104	1/4W 100K	R59	ERDS2TJ393	1/4W	39K	R301, 302	ERDS2TJ153	1/4W	15K	
R5, 6	ERDS2TJ225	1/4W 2.2M	R60	ERDS2TJ333	1/4W	33K	R303, 304	ERDS2TJ104	1/4W	100K	
R7, 8	ERDS2TJ104	1/4W 100K	R61, 62	ERDS2TJ562	1/4W	5. 6K	R305, 306	ERDS2TJ154	1/4W	150K	
R10	ERDS2TJ225	1/4W 2.2M	R63, 64	ERDS2TJ222	1/4W	2. 2K	R307	ERDS2TJ101	1/4W	100	
R11-14	ERDS2TJ101	1/4W 100	R65, 66	ERDS2TJ473	1/4W	47K	R308	ERDS2TJ1R0	1/4W	1	
R15, 16	ERDS2EJ121	1/4W 120	R67, 68	ERDS2TJ103	1/4W	10K	R309	ERDS2TJ101	1/4W	100	
R17, 18	ERDS2TJ474	1/4W 470K	R69, 70	ERDS2TJ682T	1/4₩	6. 8K	R310	ERDS1FJ270	1/2W	27	Δ
R19, 20	ERDS2TJ103	1/4W 10K	R150	ERDS2TJ103	1/4W	10K	R311	ERDS2TJ102	1/4W	1K	
R21, 22	ERDS2TJ273	1/4W 27K	R151	ERDS2TJ184T	1/4W	180K	R312	ERDS2TJ682T	1/4W	6. 8K	
R23, 24	ERDS2TJ183T	1/4W 18K	R152	ERDS2TJ103	1/4W	10K	R313	ERDS2TJ392T	1/4W	3. 9K	
R25, 26	ERDS2TJ103	1/4W 10K	R153	ERDS2TJ182	1/4W	1. 8K	R314	ERDS2TJ471	1/4W	470	
R27, 28	ERDS2TJ101	1/4W 100	R155	ERDS2TJ184T	1/4W	180K	R315	ERDS2TJ681	1/4W	680	
R29	ERDS2TJ332	1/4W 3.3K	R156	ERDS2TJ272T	1/4W	2. 7K	R316, 317	ERDS2TJ183T	1/4W	18K	
R30	ERDS2TJ472	1/4W 4.7K	R157	ERDS2TJ103	1/4W	10K	R318	ERDS2TJ393	1/4W	39K	
R31, 32	ERDS2TJ103	1/4W 10K	R158	ERDS2TJ223	1/4W	22K	R319	ERDS2TJ153	1/4W	15K	
R33, 34	ERDS2TJ823T	1/4W 82K	R161	ERDS2TJ100	1/4W	10	R320	ERDS2TJ332	1/4W	3. 3K	
35	ERDS2TJ124T	1/4W 120K	R162	ERDS2TJ332	1/4₩	3. 3K	R321	ERDS2TJ102	1/4W	1K	
36	ERDS2TJ223	1/4W 22K	R164	ERDS2TJ103	1/4W	10K	R322, 323	ERDS2TJ100	1/4W	10	
37, 38	ERDS2TJ102	1/4W 1K	R165	ERDS2TJ332	1/4W	3. 3K	R324	ERDS2TJ122	1/4W	1. 2K	
39, 40	ERDS2TJ225	1/4W 2.2M	R166, 167	ERDS2TJ102	1/4W	1K	R325-327	ERDS1FJ270	1/2W	27	Δ
41, 42	ERDS2TJ183T	1/4W 18K	R168	ERDS2TJ100	1/4W	10	R328	ERDS2TJ222	1/4W	2. 2K	
43, 44	ERDS2TJ393	1/4W 39K	R169	ERDS2TJ153	1/4W	15K	R329	ERDS2TJ473	1/4W	47K	
45, 46	ERDS2TJ394	1/4W 390K	R170	ERDS2TJ221	1/4W	220	R330, 331	ERDS1FJ270	1/2W	27	Δ
47, 48	ERDS2TJ561	1/4W 560	R171	ERDS2TJ332	1/4W	3. 3K	R332	ERDS2TJ102	1/4W	1K	
49, 50	ERDS2TJ222	1/4W 2.2K	R172	ERDS2TJ103	1/4W	10K	R401-404	ERDS2TJ684	1/4W	680K	

Ref. No.	Part No.	Values & Remarks	Ref. No.	Part No.	Val	ues & Remarks	Ref. No.	Part No.	Val	ies & Re	emarks
R405, 406	ERDS2TJ242	1/4W 2.4K	R572	ERDS2TJ472	1/4W	4. 7K	R717, 718	ERDS2TJ182	1/4W	1.8K	
R407, 408	ERDS2TJ562	1/4W 5.6K	R573	ERDS2TJ102	1/49	1K	R719	ERDS2TJ152	1/4W	1. 5K	
R409, 410	ERDS2TJ223	1/4W 22K	R574, 575	ERDS2TJ472	1/4W	4. 7K	R721, 722	ERDS2TJ222	1/4₩	2. 2K	
R413, 414	ERDS2TJ104	1/4W 100K	R576	ERDS2TJ333	1/4W	33K	R723	ERDS2TJ122	1/4W	1. 2K	
R504	ERDS2TJ472	1/4W 4.7K	R579, 580	ERDS2TJ472	1/4W	4. 7K	R724, 725	ERDS2TJ332	1/4W	3. 3K	
R505	ERDS2TJ392T	1/4W 3.9K	R581	ERDS2TJ183T	1/4W	18K	R726	ERDS2TJ222	1/4W	2. 2K	
R507	ERDS2TJ223	1/4W 22K	R582	ERDS2TJ333	1/4₩	33K	R727, 728	ERDS2TJ472	1/4W	4. 7K	
R508	ERDS2TJ821	1/4W 820	R583	ERDS2TJ103	1/4W	10K	R729, 730	ERDS2TJ682T	1/4₩	6. 8K	
R509	ERDS2TJ472	1/4W 4.7K	R586-588	ERDS2TJ223	1/4W	22K	R731, 732	ERDS2TJ123	1/4W	12K	
R511	ERDS2TJ682T	1/4W 6.8K	R589	ERDS2TJ472	1/4W	4. 7K	R733, 734	ERDS2TJ223	1/4W	22K	
R511A	ERDS2TJ104	1/4W 100K	R592, 593	ERDS2TJ103	1/4W	10K	R735	ERDS2TJ683	1/4W	68K	
R512	ERDS2TJ472	1/4W 4.7K	R594	ERDS2TJ223	1/4W	22K	R751	ERQ16NKWR15E	1/6W	0. 15	(EB, EG,
R512A	ERDS2TJ393	1/4W 39K	R595	ERDS2TJ562	1/4W	5. 6K					GC, GN) 🛆
R513	ERDS2TJ123	1/4W 12K	R596	ERDS2TJ272T	1/4W	2. 7K	R796-799	ERDS2TJ393	1/4W	39K	
R516	ERDS2TJ223	1/4W 22K	R597, 598	ERDS2TJ102	1/4W	1K	R971	ERDS2TJ151	1/4W	150	(DECK1)
R517	ERDS2TJ821	1/4W 820	R601-605	ERDS2TJ472	1/4W	4. 7K	R971A	ERDS2TJ151	1/4W	150	(DECK2)
R520	ERDS2TJ472	1/4W 4.7K	R606	ERDS2TJ103	1/4W	10K					
R522	ERDS2TJ223	1/4W 22K	R607	ERDS2TJ472	1/4W	4. 7K			CHIP J	UMPERS	
		1/4W 820	R610	ERDS2TJ103	1/4W	10K					
R523	ERDS2TJ821	1/2W 27 A	R611, 612	ERD2FCVJ6R8T	1/4₩	6.8 🛆	J1, 2	W5E-18H	CHIP	JUMPER	(DECK1)
R524	ERDS1FJ270	-,	R613, 614	ERDS2TJ102	1/4W	1K	J1A-5A	W5E-18H	CHIP	JUMPER	(DECK2)
R525	ERDS2TJ332	1/4W 3. 3K		ERDS2TJ101	1/4W	100	- 1021 011		-		
R526	ERDS2TJ101	1/4W 100	R616, 617			10 🛆			CAPAC I	TORS	
R527	ERDS2TJ332	1/4W 3. 3K	R618, 619	ERD2FCVG100T	1/4W	2. 2K			OIN IN	10.10	
R528	ERDS2TJ222	1/4W 2.2K	R620, 621	ERDS2TJ222			C3, 4	ECBT1H471KB5	50V	470P	
R529, 530	ERDS2TJ103	1/4W 10K	R622, 623	ERDS2TJ101	1/4W	100	C5, 6	ECBT1H102KB5	50V	1000P	
R532	ERDS2TJ102	1/4W 1K	R624	ERD2FCVJ6R8T	-	6.8 🛆	C7, 8	ECBT1H471KB5	50V	470P	
R534	ERDS2TJ682T	1/4W 6.8K	R627	ERD2FCVJ6R8T	-		C10	ECEA1HKAOR1B	50V	0. 10	
R535	ERDS2TJ472	1/4W 4.7K	R628, 629	ERD2FCVG270T			C11, 12	ECBT1E103ZF	25V	0. 010	
R536	ERDS2TJ123	1/4W 12K	R630	ERDS2TJ472	1/4₩		C13, 14	ECQB1H682JF3	50V	6800P	
R538	ERDS2TJ223	1/4W 22K	R634	ERG1SJ220E	1W			ECEA1AU101	10V	100U	
R539	ERDS2TJ821	1/4W 820	R635	ERDS2TJ101	1/4		C15, 16		50V	0. 470	
R540	ERDS2TJ472	1/4W 4.7K	R636	ERDS2TJ222	1/4		C17	ECEA1HKAR47B	16V	100	
R541	ERDS2TJ682T	1/4W 6.8K	R637, 638	ERDS2TJ101	1/4		C18	ECEA1CKA100B	-	120P	
R547	ERDS2TJ223	1/4W 22K	R639	ERDS2TJ103	1/4		C19, 20	ECKR2H121KB5	+		
R548	ERDS2TJ821	1/4W 820	R640	ERDS2TJ472	1/4%		C21, 22	ECEA1CKA100B	16V	100	
R549	ERDS2TJ472	1/4W 4.7K	R641	ERDS2TJ103	1/4		C23, 24	ECEA1HKA2R2B	50V	2. 2U	
R550	ERDS2TJ223	1/4W 22K	R643	ERDS2TJ331	1/49		C25, 26	ECEA1HKAR47B	50V		
R551	ERDS2TJ821	1/4W 820	R644	ERDS2TJ1R0	1/4	1	C27, 28	ECEA1CKN100B	16V	100	
R552	ERDS1FJ270	1/2₩ 27 △	R701	ERDS2TJ821	1/4		C29-32	ECEA1CKA100B	16V	100	
R553	ERDS2TJ332	1/4W 3.3K	R702	ERDS2TJ102	1/4		C33, 34	ECEA1CKA220B	16V	220	
R554	ERDS2TJ101	1/4W 100	R703	ERDS2TJ153	1/49	15K	C35	ECQB1H392JF3	50V		
R555	ERDS2TJ332	1/4W 3.3K	R704	ERDS2TJ122	1/49	1. 2K	C37, 38	ECEA1CKA220B	16V	22 U	
R556	ERDS2TJ222	1/4W 2.2K	R705	ERDS2TJ102	1/4	1 K	C39, 40	ECBT1E103ZF	25V		
R557, 558	ERDS2TJ103	1/4W 10K	R706	ERDS2TJ152	1/49	1. 5K	C41, 42	ECEA1HKA010B	50V	10	
R560-563	ERDS2TJ103	1/4W 10K	R707	ERDS2TJ182	1/4	1. 8K	C43, 44	ECEA1CKA100B	16V	10U	
R564	ERDS2TJ331	1/4W 330	R708	ERDS2TJ102	1/4	1K	C45, 46	ECBT1E103ZF	25V	0. O1U	
R565	ERDS2TJ183T	1/4W 18K	R709	ERDS2TJ821	1/49	820	C61, 62	ECBT1H561KB5	50V	560P	
R567	ERDS2TJ471	1/4W 470	R710, 711	ERDS2TJ562	1/49	5. 6K	C63	ECEA1HKA010B	50V	1U	
R568	ERDS2TJ331	1/4W 330	R712, 713	ERDS2TJ102	1/49	1K	C64	ECEA1CKA100B	16V	10U	
R569	ERDS2TJ103	1/4W 10K	R714	ERDS2TJ821	1/4	820	C65	ECBT1E103ZF	25V	0. 01U	
R570	ERDS2TJ472	1/4W 4.7K	R715	ERDS2TJ122	1/4	7 1. 2K	C67, 68	ECBT1C472KR5	16V	4700P	
R571	ERDS2TJ102	1/4W 1K	R716	ERDS2TJ152	1/4	1. 5K	C150	ECBT1E103ZF	25V	0. 01U	

Ref. No.	Part No.	Values & Remarks	Ref. No.	Part No.	Values & Remarks			
C151	ECEA1AU471	10V 470U	C521	ECBT1E103ZF	25V 0.01U			
C152	ECBT1E1032F	25V 0. 01U	C522	ECEA1AKA220B	10V 22U			
C153	ECAOJM222B	6. 3V 2200U	C601	ECKR2H682PE	500V 6800P			
C154	ECBT1H331KB5	50V 330P	C602	ECEA1EU222B	25V 2200U 🛆			
C155	ECBT1H102KB5	50V 1000P	C603	ECA1HM221B	50V 220U ⚠			
C301	ECBT1E103ZF	25V 0.01U	C604	ECKR2H682PE	500V 6800P			
C302	ECEA1CKA100B	16V 10U	C605, 606	ECA1EM102B	25V 1000U △	1		
C303, 304	ECBT1C122KR5	16V 1200P	C607, 608	ECBT1E103ZF	25V 0.01U			
C305, 306	ECQB1H103JF3	50V 0. 01U	C609, 610	ECEA1AU221	10V 220U			
C307, 308	ECQB1H223JF3	50V 0. 022U	C611-614	ECBT1E103ZF	25V 0.01U			
C309, 310	ECQV1H473JM3	50V 0. 047U	C615, 616	ECA1AM102B	10V 1000U			
C311, 312	ECBT1H121KB5	50V 120P	C617, 618	ECBT1E103ZF	25V 0.01U		1	
C313, 314	ECKR2H821KB5	500V 820P	C619	ECA1EM221B	25V 220U			
C315, 316	ECBT1E223ZF	25V 0. 022U	C620	ECA1CM222B	16V 2200U △			
C317	ECBT1H220J5	50V 22P	C701-705	ECBT1E103ZF	25V 0.01U			
C318	ECQP1153JZ	100V 0. 015U						
C320	ECBT1H220J5	50V 22P						
C322	ECEA1AU221	10V 220U						
C323	ECBT1E1032F	25V 0.01U				 		
C324	ECEA1EKA4R7B	25V 4. 7U				 		
C325	ECKR1H392KB5	50V 3900P						
C326	ECEA1HKAOR1B	50V 0.1U						
C327	ECKW1H222KB5	50V 2200P	 			 		
C328	ECKD1H682KB	50V 6800P						
C329	ECKW1H222KB5	50V 2200P						
C330	ECBT1E103ZF	25V 0.01U						
C332	ECBT1E103ZF	25V 0.01U				-		
C401, 402	ECBT1C122KR5	16V 1200P						
C403, 404	ECBT1C152KR5	16V 1500P						
C405, 406	ECQB1H222JF3	50V 2200P				 		
C407, 408	ECQV1H124JM3	50V 0. 12U						
C409, 410	ECEA1HKA010B	50V 1U						
C411, 412	ECEA1HKA2R2B	50V 2. 2U						
	ECEA1HKAO10B	50V 2. 20						
	ECQB1H152JF3	50V 1500P						
C417, 418	ECEA1HKAR47B	50V 0. 47U						
C419, 420	ECQB1H152JF3	50V 1500P	***************************************					
C421, 422	ECEA1HKAR47B	50V 0. 47U	<u> </u>					
C502	ECEA1HKAR47B	50V 0. 47U						
C504								
C504 C505	ECBT1E103ZF	25V 0. 01U						
	ECEA1CN100SB	16V 10U						
C507	ECEA1HKAR47B	50V 0. 47U						
C508	ECBT1E103ZF	25V 0. 01U	-					
C509	ECEA1CN100SB	16V 10U	<u> </u>					
C510	ECEA1CKA100B	16V 10U						
	ECEA1CKA100B	16V 10U						
	ECEA1EKA4R7B	25V 4. 7U						
	ECEA1CKA100B	16V 10U						
	ECEA1HKA010B	50V 1U						
	ECEA1CKA100B	16V 10U						
	ECBT1E103ZF	25V 0. 01U						
C519	ECEA1AKA220B	10V 22U						

ORDER NO. AD9303094S0 rvice Ma Supplement Cassette Deck

Dolby NR-Equipped Stereo Double Cassette Deck RS-TR777

DOLBY B.C NR HX PRO

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Colour

Area

(GN)

(K) ... Black Type

Alvu				
Suffix for Model No.	Area	Colour		
(PP)	U.S.A./Canada.			
(EB)	Great Britain.			
(EG)	Germany, Italy and Europe.	(K)		
(GC)	Asia, Latin America, Middle Near East and Africa.			

Oceania.

Please file and use this supplement manual together with the service manual for Model No. RS-TR777, Order No. AD9301002C0.

Note: This supplement is intended to provide additional information or corrections to the existing service manual for Model No. RS-TR777. Be sure to update your service manual for future reference.

CHANGES

CHANGE IN REPLACEMENT PARTS LIST (on pages 61, 63.)

Note: • Important safety notice:

Components identified by $\underline{\Lambda}$ mark have special characteristics important for safety. Furthermore, special parts which have purposes of fire-retardant (resistors), high-quality sound (capacitors), low-noise (resistors), etc. are used.

When replacing any of components, be sure to use only manufacturer's specified parts shown in the parts list.

	Chang	je of Part No.	Part Name & Description	Remarks	
Ref. No.	ORIGINAL	NEW	Part Name & Description		
RESISTORS	S				
R310					
R325-327	ERDS1FJ270	ERDS1FVJ180T	C. RESISTOR, 1/2W, 18Ω	Δ	
R330, 331					
CAPACITO	RS				
C523, 524		ECBT1E103ZF	C. CAPACITOR, 25V, 0.01µF	Addition	
C610	ECEA1AU221	ECEA1AU471	E. CAPACITOR, 10V, 470µF		

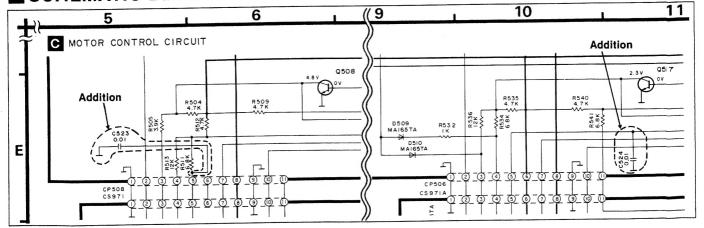
Technics

■ ADJUSTMENT PROCEDURE (See page 13.)

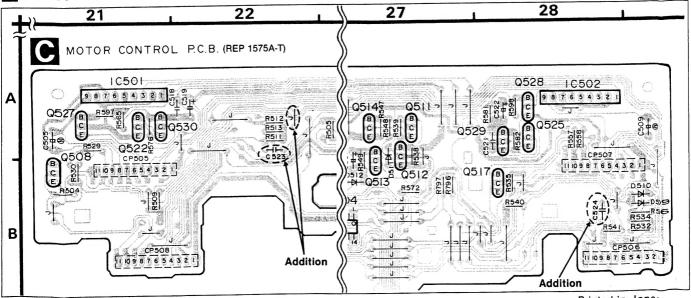
ſ	High Low	0	1	2	3	4	5	6	7	
t	0			Liver Liver	-	В0	68	30	88	
Ì	1				_	00	78	68	68	
Ì	2			D0	- 68		38	В0	(68)	· ·
Ì	3	_		80	78		64	6C	во) г	Change
l	4	_		E0	38	_	A8	(70	B8	
ı	5	_		7C	64	_	50	A0]	55	
	6	_		FB	A8	80	(70	B1 /	68	
	7	_		F5	00	58	74)	58	78	
	8			0F		18	AB		50	
	9		_	2B	_	80	68		. 72	
_	A	Ī		12		88			4A	
7	F	_	_		68		60	80		

Fig. 1

SCHEMATIC DIAGRAM (See pages 37, 38.)



■ PRINTED CIRCUIT BOARDS (See pages 47, 48.)



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Parts Change Notice

Model No. RS-TR979 (EB, EG, GC, PP)/RS-TR777 (PP, EB, EG, GC, GN)/RS-CA1060 (E)/ RS-CH510 (E)/ RS-TR575 (P, PC, E, EB, EG, GC, GN)/SA-LS10 (EB, EG, Ei)/ RS-BX501 (E, EB, EG), (EP)

> Please revise the original parts list in the Service Manual to conform to the change (s) shown below. If new part numbers are shown, be sure to use them when ordering parts.

Passan for Charma		1.14			•				
Reason for Change 1. Improve perfo		cled item indicates t	he reason. If no marki	ng, see the Note	s in the bottom column.				
2. Change of mat		nsion							
To meet approved specification Standardization									
5. Addition									
6. Deletion									
7. Correction									
8. Other									
Interchangeability	Code **	The circled item Indi	cates the interchangeal	oility. If no mai	king, see the Notes in the bottom colum	n.			
Parts		roduction							
Original	Early	Origin	nal or new parts may b	e used in either	early or late production units.				
A New \geq	Late	Use o	original parts until the s	supply is exhaus	ted, then stock new parts.				
Original	Early	Origin	nol nouse many be used i						
B New	Late	or lat	Original parts may be used in early production units only. New parts may be used in either or late production units. Use original parts where possible, then stock new parts.						
Original	- Early								
© New <	Late		New parts are to be used in both early and late production units. Stock new parts only.						
Original -	- Early	1	Original parts must be used in early production units. New parts must be used in late production units only. Stock both original and new parts.						
D New ——		Origin							
E Other	- Late		3,000	K DOM ONGMA	and new parts,				
		i							
Part Number Infor	rmation	1	T	<u></u>					
Model No.	Ref. No.	Original Part No.	New Part No.	Notes (*, **)	Part Name & Description	Q'ty			
MECHANISM PAI	RTS								
RS-TR979	101	RXQ0264	RFKRSTR979	7,C	HEAD BLOCK (REC./PLAYBACK)				
	201	RXQ0264	RFKRSTR979	7,C	HEAD BLOCK (REC./PLAYBACK)				
RS-TR777	101	RXQ0269	RFKRSTR777	7,C	HEAD BLOCK (PLAYBACK)				
	201	RXQ0264	RFKRSTR979	7,C					
RS-CA1060	106	RXQ0317-1	RFKRSTR777		HEAD BLOCK (REC./PLAYBACK)				
10 0/11000	106	RXQ0316-1	RFKRSTR979	7,C	HEAD BLOCK (P. B)				
RS-CH510	106	RXQ0317-1		7,C	HEAD BLOCK (R/P)				
10-011010			RFKRSTR777	7,C	HEAD BLOCK (R. B)				
00 TDF7F/04 L040	206	RXQ0316-1	RFKRSTR979	7,C	HEAD BLOCK (R/P)				
RS-TR575/SA-LS10	106	RXQ0316-1	RFKRSTR979	7,C	HEAD BLOCK (R/P)				
RS-BX501				í I	1				

Part file this parts change notice with your copy of the Service Manual for model No. RS-TR979 (EB, EG, GC, PP)

RS-TR777 (PP, EB, EG, GC, GN), RS-CA1060 (E), RS-CH510 (E), Order No. AD9407189C8.
RS-TR575 (P, PC, E, EB, EG, GC, GN), Order No. AD9403060C0.

SA-LS10 (EB, EG, Ei), RS-BX501 (E, EB, EG), RS-BX501 (EP),

Order No. AD9301003C0. Order No. AD9301002C0. Order No. AD9406159C2. Order No. AD9409247C2.

Order No. AD9403072C2. Order No. AD9407202A2.



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